



MLCA NEWSLETTER

LOWER SCHOOL

Fall 2022



Lower School Overview

The Lower School students have been hard at work this fall learning to do what we do best at MLCA—namely, to love what is beautiful. Such a task requires equal parts of herculean effort and effortless enjoyment. This special mixture of self-discipline and playful leisure defines what our young students experience day to day. Tying knots, practicing piano, analyzing poems, translating sentences, discovering mathematical truths, identifying birds and trees, listening to ancient stories, and programming robots are a part of every Lower School student's curriculum between kindergarten and sixth grade. Each of our subjects require something difficult of our students, but the reward for such perseverance is priceless. And so, with sweat on their brows and smiles on their faces, our Lower School students enter their classrooms with joy and gratitude, excited for the ever-possible flash of beauty they might get to glimpse that day.

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Classmates watch as sixth grader Abigail Vuernick and seventh grader Benjamin Vuernick battle in four square.

Kindergarten

Subject: Math

Teacher: Mrs. Shpilman

We have been having a blast in kindergarten Math class this year! Since the beginning of the school year, we have been focusing on several key topics that are essential to building a strong number sense and a good mathematical foundation for the future.

We first tackled the concept of counting, which is aimed at promoting number sense and number literacy in the children. We have been using the number line to learn to recognize and name two-digit numbers as well as learning to tell the difference between 12 and 21 and finding numbers within a range (e.g., bigger than 10 but smaller than 25). We have been looking for patterns in numbers and will continue to do so as we start working with 100 charts in the winter term. Additionally, we have been practicing counting forward and backward along the number line, starting at different points on the number line, so that students don't simply memorize the numbers in order like a song, but are able to place them in context and compare them. We have also been identifying "number neighbors" - e.g., what number comes between 12 and 14? Students really enjoy playing with "Mrs. Frog", a stuffed animal that I throw to each student while saying a number, and they have to say either the next or the previous number and throw it back (this is a great game to practice at home!)



First grader Deniz Gotkas joins kindergarteners (from left to right) Noa Hungerford, Rei Hedge, Tallulah Krellner-Oathes, and Elanor McFarland as they count pumpkin seeds for a whole school estimation challenge.

For arithmetic practice, we have been working on single-digit addition through a variety of tools. One of our favorite games is "1-2-3 peek and see", where I hold up cards with dots or animals or put up some magnets on the board and show them for a few seconds. Students then have to figure out how many objects there were by remembering the picture and then counting in their heads. They're getting better and better every day! We also practice addition by rolling 2 or 3 dice (sometimes we use 6-sided dice, and other times, 10-sided dice), writing down the problem, and figuring out the answer. This helps the

students to practice not only their addition skills but to master basic mathematical notations and not forget important things like the equal sign or the plus sign.

Through the use of special topics and math games, we have started learning about shapes by building and naming pentagons, hexagons, octagons, and various quadrilaterals on geoboards. We'll continue exploring this further in the winter. We have also spent a lot of time building with a variety of different block sets (Qbitz, geoblocks, and snap cubes).

I love teaching kindergarten Math at MLCA and I am looking forward to covering a lot of mathematical ground this year!

Subject: English
Teacher: Ms. Na

Our kindergarten English students have been hard at work this trimester! Every class begins with poetry, which the students have reported is their favorite part of English class! So far the students have learned four poems: "Hope' is the Thing With Feathers," by Emily Dickinson, "The Crocodile," by Lewis Carroll, "Who Has Seen the Wind?," by Christina Rossetti, and "The Swing," by R.L. Stevenson. Poetry recitation is an important part of the kindergarten curriculum at MLCA for a host of reasons, and it whole-heartedly embraces the motto, "Children are never too young to learn great things." At an early age, students are developing key retention and memorization skills by committing poems of varying lengths to memory. They are also taught to identify stanzas and are learning the basics of meter and rhyme. Their minds are enriched with beautiful, creative verse that invokes reflective questioning from just 5-7-year-olds! Kindergarten students are adding words like "extremity", "doth", and "neither/nor" to their growing vocabulary. We have discussed at length what the soul is and what it means for something to exist without it being visible. I am repeatedly impressed by their ability to thoughtfully consider these weighty themes and ideas with genuine curiosity and wonder. Ask your child to recite their favorite poem so far—and make sure they do it in proper poetry posture... with a bow at the end!

The kindergarteners' English curriculum goes hand in hand with their History lessons. They are exposed to the exciting mythology that serves as the backdrop for many of the historical events they are learning about. As we studied ancient Egyptian history, we embarked upon journeys



Kindergartener Miriam Li Bergolis shows off her writing skills!

through Egyptian mythology, learning about betrayal, love, leadership, and why the Nile river overflows through characters like Ra, Osiris, Isis, Set, and many, many more!

In addition to poetry and storytelling, MLCA kindergarteners engage in fun activities meant to strengthen their basic reading, speaking, comprehension, and handwriting skills. We do this through various alphabet sound/letter recognition games and READ, WRITE, VOWEL exercises, which are designed to strengthen the students' word-decoding skills, proper letter formation, and vowel recognition. We also do listen-to-comprehend exercises that help refine the students' attention to detail.

Kindergarteners are learning when and how to properly use upper and lower case letters, and have begun studying the short vowel sounds. The curriculum will prepare the students well for first grade!

Subject: Story Time

Teacher: Ms. Na

We began our Story Time sessions with an introduction to one of the most classic stories in the Western Tradition: *The Odyssey*. We traveled with Odysseus and his men as they embarked upon fantastical adventures involving cyclopes and witches that turn men into pigs! Although we will revisit *The Odyssey* and other Greek mythology in English class when we begin studying ancient Greece in History, it was important to set the foundation of storytelling with one of the classics. We then pivoted to the 20th century to begin a more upbeat, silly adventure with Christopher Robin, Winnie the Pooh, and friends. We are over halfway through the complete collection of A. A. Milne's *Winnie the Pooh*, and our classroom is filled with giggles!



Ninth grade Reading Buddy Nicky Zafiriou reads aloud to kindergarteners John Henry and Raina Miller

The goal of kindergarten Story Time is to expose students to great works of literature; we reinforce the stories with coloring pages, crafts, and other fun activities meant to get the children excited about listening to (and eventually reading) the beautiful stories embedded in the western tradition. I have so enjoyed reading and laughing alongside this year's kindergarten students!

One of the most exciting Story Time classes each week is the Reading Buddies program that takes place each Tuesday. Four Upper School students have graciously volunteered to read to our youngest students in this weekly session, and what a joy it has been! With my guidance, the four different groups are delving into tales of

adventure, bravery, magic, and royalty-some Upper School students are even doing live translations from French! The Reading Buddies program has been a great way to foster a warm sense of community among our youngest and oldest students.

Subject: History
Teacher: Ms. Na

MLCA's youngest History students are hard at work learning about the very foundation of human civilization. We began the year with this overarching question: What is History? We have continued to explore this question as we travel through the ancient world. Students have learned about nomads settling into farmers, are familiar with the geographical location of the Tigris and Euphrates rivers (and the fertile crescent that lies in between!), and have delved into the rich history of early ancient Egypt. We learned about the unification of Upper and Lower Egypt under King Narmer of Upper Egypt; "King Narmer wore white armor" was a mnemonic device used to help the students remember the white crown of Upper Egypt and the red crown of Lower Egypt that were eventually combined into the Double Crown of Egypt upon Narmer's victory. We also worked hands-on with clay as we learned about the difference between Egyptian hieroglyphs and Sumerian cuneiform. After reading about mummies and pyramids and even a bit of Egyptian mythology, we shifted to talk about King Sargon and the Akkadians, giving a name and geographical location to some of the cities in Mesopotamia. After learning about Sargon's conquest-turned-military-dictatorship of Sumer, we delved into the story of Abram from the city of Ur, another city in Sargon's empire. We delved into Abram's lineage wherein the students were exposed to the story of Joseph and the coat of many colors.

Most recently, we have been talking about Hammurabi's Code-the first recorded set of written laws- and have discussed at length whether or not we think his laws were fair. The classroom was pretty split, so we've made our own list of amendments!

The kindergarten History classes at MLCA pair well with the story-telling portion of the kindergarten English curriculum; students are learning about real historical events, and then get to delve into the creative and imaginative parts of historical storytelling through epics and legends. It's a wonderful interdisciplinary bridge that creates a holistic learning experience for our youngest students.

During each lesson, kindergarten students are given their "History notebook". While the teacher reads, they are encouraged to draw upon the lesson for artistic inspiration. In the last 15 minutes of class, students are able to share their drawings with the class and explain the story behind them. This drawing exercise helps the students connect their creativity to the lesson and enforces their memory of key points embedded in the lesson. I am excited to continue our exploration of the ancient world with MLCA's kindergarten class!

Subject: French

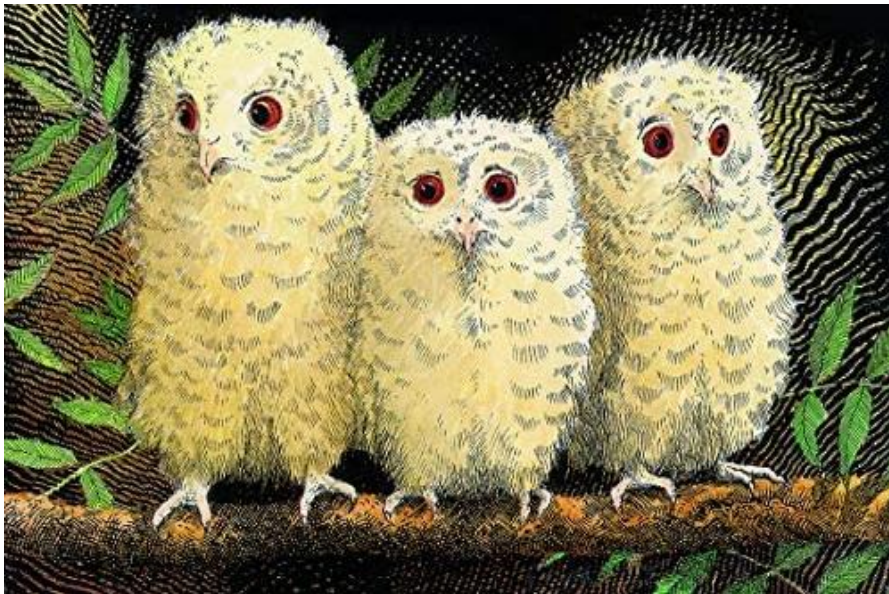
Teacher: Mme. Trudeau

The kindergarten class had a wonderful start to the school year. The students hit the ground running with contagious enthusiasm. For the past two months, the students have grown accustomed to a nearly all-immersive French class. We have story time with a new book every week and it is delightful to hear their voices in chorus joining in the story. One favorite is *Les bébés Hiboux* in which one of the baby owls repeatedly exclaims, "I want my mommy!" in French, of course! After storytime, we have a follow-up activity, such as a bit of craft-making or, in the case of *Les bébés Hiboux*, we made a class book based on the pattern sentence *Je veux* (I want).

Through songs, games, and books, the kindergarteners learned the words for animals living in the forest (frog, owl, eagle, bird, duck, mouse, etc.), things found on MLCA grounds (tree, forest, wood, leaves, etc.), the weather, days of the week, colors, shapes, numbers to 10 (or more) and the ABC song. They also acquired basic conversational skills, such as asking and answering questions about how they are doing, how to say their names, and use of short sentences with *Je veux* (I want), *Je vois* (I see), and *Qui fait?* (Who does?).

With Symtalk, students have been introduced to some animals (dog, cat, and monkey), food (croissant, apple, and cake), characters of Symtalk, and some verbs (eat, drink, play with, look at, etc.). The children have been translating, reading, and making sentences with vocabulary cards they cut out. Their favorite part is making silly sentences with the cards, such as "The dog drinks orange juice" or "The cat eats the dog," which are always read with giggles.

We began exploring the five senses, which will continue until the winter break.



An illustration from *Les bébés Hiboux*.

Subject: Science
Teacher: Mr. Darer

We began the school year by learning about what a category is and practiced organizing items into different categories based on common properties. Next, the class planted bean seeds and learned about the structure and function of different parts of a plant. We discussed how plants use the sun's energy to make their own food (photosynthesis) and completed a worksheet and observed pictures that allowed the students to figure out for themselves the difference between a plant and an animal.

The kindergarten class also completed an experiment to determine how many pigments are in the different leaves we found around the school. We collected tulip, maple, and oak leaves, crushed up the leaves, placed them in rubbing alcohol to help extract the pigments, put a strip of coffee filter paper in the glass jar, and covered the jar for two days. When we came back, we observed that the different types of pigment molecules traveled different distances up the filter paper. We saw the colors purple, red, green, and yellow depending on which leaf was crushed up. We next discussed that objects, plants, and animals are made of parts and used this concept as an introduction to the idea that everything is made of particles (atoms). Through class discussions, demonstrations, experiments, and games, we learned the differences between solids, liquids, and gasses. Next, we are going to learn about how one state of matter can change to another state (for example, water boiling into water vapor).

Subject: Hands-On Skills
Teacher: Mr. Darer

In Hands-On Skills class, we have made several trips to the school garden where the students have harvested kale, radishes, chickweed, and lemon clover (wood sorrel). We have also been practicing identifying trees around the school based on their leaf shapes. We discussed characteristics of the leaves that can help us tell them apart. The students have learned to identify Beech, Eastern Redbud, Oak, Black Walnut, Red Maple, Eastern Hemlock, Sassafras, Dogwood, Sugar Maple, Cedar, Pine, Spruce, and Tulip tree leaves.



Mr. Darer helps Miriam Li Bergolis, Noa Hungerford, and Raina Miller work on identifying leaves.

We have also learned how to tie different types of knots. The class can now tie an overhand knot and figure eight knot. Some students are even able to tie these knots behind their backs! We also discussed the uses of these types of knots. Stopper knots (overhand, figure eight) are tied at the end of a rope to prevent the rope from slipping through a small opening. We also have been observing birds that come to the bird feeders at school and learning to identify birds based on their physical characteristics. The students have learned to identify most of the following birds: white-breasted nuthatch, robin, cardinal, blue jay, house sparrow, song sparrow, bald eagle, crow, black-capped chickadee, and turkey vulture.

Subject: Art

Teacher: Mrs. Butterworth

During kindergarten Art classes we introduce the students to basic principles of observation and drawing. I guide them to look for simple shapes within complicated objects before we start, and to observe the details, patiently checking and rechecking their work to be sure they haven't missed anything. Kindergarteners are still developing dexterity and finger strength, so they need encouragement to color accurately inside the lines, but they can begin using tools of perspective like size, placement and intensity to highlight the main subject of their pictures. Kindergarteners can even use color and shading to create the illusion of volume. It is a pleasure to see how the students incorporate these tools into their own drawings even when art class is over.

Subject: Violin

Teacher: Mrs. Butterworth

During this trimester, kids were learning how to hold the bow and the violin, how to act as a team, to follow the instructions, and how to move the bow in the same direction on the E string. We spent time learning simple rhythms. The students now see the difference between whole, half, and quarter notes; they can write rhythms on a board after I play it. They play rhythms on the E string and I create the melody. The students have to play in the right direction and recognize if I play the melody in major or minor. Also, we started to play the violin with all 4 fingers, pizzicato only. In order to achieve this, the students have practiced controlling their position. It is hard for beginners to play the violin nonstop, so we combine playing and theory, playing in groups and playing solo so that kids can rest. Now when they understand the position and can make it more comfortable, they are ready to make rests shorter

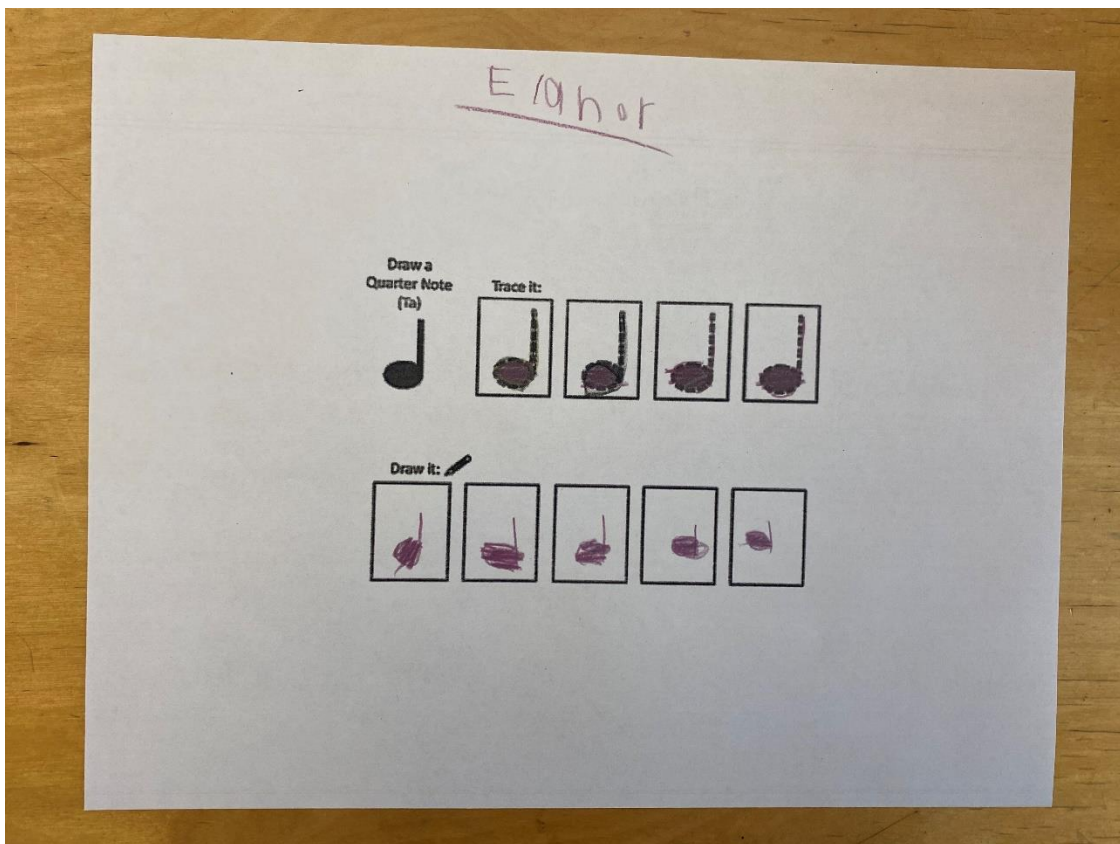
Subject: Music Theory

Teacher: Mr. Anthony

To try and keep the kids attentive and learning at their best during a class period, I wanted to be ready to incorporate different activities that could relate key concepts

about music engagingly and intuitively. Ultimately, we want to instill skills that will inspire confidence in the children to further explore music themselves. Listening and identifying sounds they were hearing was a first step (major or minor, step vs. skip, octave, etc.), but the kids were also urged to apply some of the concepts they learned by playing piano and singing. When discussing the concept of an octave, I had each of them play it on the piano, counting to 8 starting with the first note as 1. We noticed that the major scale (basic musical building block) has seven notes, with the eighth note sounding like the first (do). This is then a new beginning of the scale at the next higher octave.

After counting notes and recognizing octaves with their ear, I encouraged each of them to play an octave with a mallet on a children's xylophone. This shows them that the same sound is present in other instruments as well as when sung. The xylophone was a big hit! Each student wanted to keep playing it for a few minutes to explore the different sounds. Solfege syllables for the major scale were reinforced by learning the song "Do, Re, Mi" from *The Sound of Music*. If the kids wanted to move around more, we practiced clapping quarter and half notes, bouncing a ball in time to a partner, or held the ever-popular games of musical chairs and Simon says. We also did a reading game to memorize treble notes with 10 or 12 different flash cards.



Elanor McFarland works on writing quarter notes.

First Grade

Subject: Math

Teacher: Dr. Fradkin

The first-grade students were very excited to start the Beast Academy series this year. Their first unit dealt with counting. They discovered that accurate counting often involves being both careful and clever. The students experimented with grouping objects into “easy to count” collections. They also learned that counting does not always have to start from the beginning - the known quantity of one collection can be used to find the quantity of a similar one.

The second unit was all about shapes. After learning the names of some common shapes and practicing drawing them on dot grids, the students solved many problems that involved flipping and rotating the shapes. These problems were often quite tricky but I was very impressed with how much the students persevered and with what they were able to achieve.

The third unit was on comparing. The students compared quantities, numbers, and lengths and solved puzzles that involved comparing. The final chapter that the first-grade students worked on this trimester had them explore addition. The students discovered that it is very easy to add 10 to another number. Also, they saw how knowing pairs that make ten can help solve many other addition problems

Subject: English

Teacher: Ms. Na

The first-grade English class has kicked off their first trimester with great enthusiasm and determination! Every day, the students are growing into more confident and capable readers, writers, and reciters of poetry. We began each lesson with poetry practice. So far, students have committed three poems to memory: “A Chill,” by Christina Rossetti, “The Lord Will Provide,” by William Cowper, and “The Road Not Taken,” by Robert Frost. Memorizing poetry is an important part of the English curriculum here at MLCA; it sharpens students’ memorization skills and provides them with a storehouse of beautiful verse they can return to again and again. It also equips them with the skills necessary to analyze poems through various elements. Students learned about trochaic meter and how to recognize it in Christina Rossetti’s “A Chill.” They discovered alliteration and iambic trimeter and tetrameter in William Cowper’s “The Lord Will Provide.” In Robert Frost’s “The Road Not Taken,” students caught on quickly to the ABAAB rhyme



A rare 1910 edition of Christina Rossetti's poems

scheme. One of the most exciting parts of first-grade poetry is the thoughtful and creative discussion that unfolds with each stanza. What do these words mean? Why do they matter? What inspired the poet to write this? Our conversations about the meaning of each poem have been nothing short of wonderful as students grapple with concepts like loneliness, sacrifice, salvation, hope, and bravery. What an inspiring way to start each English lesson!

MLCA's first graders have been diligent and attentive students of phonics. We learn about two phonics sounds each week, a practice that is not only fun but also enhances their reading skills. This acute attention to phonics is helping students bridge the gap between word decoding and reading comprehension. I am delighted by the progress the students are making with sight-word recognition and encourage you to practice sight words with your children at home! If you would like a list of the words we are learning, I would be happy to share it with you.

In first-grade English, students are also learning the art of penmanship. They are practicing proper pencil grip, where to start and finish a letter, and how to create neat, parallel lines. With enough practice, I am confident that these students will be showcasing beautiful and legible penmanship in no time!

Subject: Story Time
Teacher: Ms. Na

This trimester, the first-grade Story Time class has journeyed through sleep-inducing poppy fields, across yellow brick roads, and over the vast desert that surrounds the magical land of Oz! We began the year with L. Frank Baum's *The Wonderful Wizard*



Ms. Na reads *Matilda* to the joint kindergarten first grade Story Time.

of Oz, where we joined Dorothy and her friends on an adventure unlike any other. After numerous debates about which is better, to have a heart or a brain, we read *The Marvelous Land of Oz*, which was full of witty jokes, memorable characters, and a most surprising twist at the end! The Oz books seem to be flying off the library shelves, and we have found ourselves in the

midst of Baum's third book of the 14-volume collection, *Ozma of Oz*. The tales of

friendship, perseverance, and hardship that are embedded within each book challenge the students with difficult themes and ideas. I am continually amazed by the students' ability to ask insightful questions and engage critically with the various ethical and philosophical ideas the stories invoke. Between various coloring activities and comprehension question games, our Story Time classes have been busy and fruitful.

Once a week we join kindergarten for Story Time. We've been reading through some of Roald Dahl's best stories. *Matilda* is our favorite! We even built and decorated a paper-mache chocolate cake, just like in the book. I am excited to embark upon more exciting adventures with this group of first graders!

Subject: History

Teacher: Mrs. Gandy

In first-grade history, we sneakily climbed to Mount Olympus to take fire for humankind and then hid the fire in charcoal stored in a piece of fennel. The students made sure not to be caught by the mighty Zeus! We also created paper Medusa masks knowing that just a stare at the masks could turn someone into stone. We quieted our minds and bodies to be soothed and moved by ancient Greek songs played on the lyre. Then we had a taste of honey to understand a small bit of Greek culture. These were just a few of the activities that the first-graders took part in to understand the myths of the ancient Greek heroes. Before taking part in one of the activities or crafts listed above, the first-grade students always began class by learning a new Greek letter, and they made sure to write the upper and lower case versions of that letter very precisely.

On occasion, they would also sit around a large floor world map and travel to Greece with the Lego version of Mrs. Gandy. They've learned that if they find the boot on the map then the heel of that boot will point them directly to Greece. As well, each student has started labeling their own individual maps of Greece to better understand the setting of the myths. Jason and the Golden Fleece was one of the first myths the first-graders explored. They learned that determination, courage, and some help from friends were needed in order for Jason to retrieve the golden fleece that would lead to taking back the throne. The first-grade class then moved on to the story of Theseus and the Minotaur. With some wit and strength, the students were able to see that the Minotaur was not undefeatable. Unfortunately, the students saw that not all Greek heroes have a happy ending when they learned that Theseus was forgetful in not changing the sails on his boat leading to the death of his father. Additionally, the students had time to learn about The Labours of Hercules, The Adventures of Perseus, Prometheus, and Orpheus & Eurydice. Each of these myths guided us in understanding who the Greeks saw as a hero and which characteristics they viewed were important to being a person.

Subject: French
Teacher: Mme. Trudeau

Understandably, first graders had basic knowledge from last year and acquired more vocabulary since the beginning of the new school year. The most important addition to their French repertoire was the introduction of grammar and sentence writing created during Symtalk lessons. During the first several weeks, we reviewed vocabulary and solidified our knowledge of masculine and feminine articles and pronouns (il/elle). We worked on explaining which article/determinant and pronoun to use, distinguishing between the/some/a, but also using the third-person pronoun il for boy and elle for girl. When I introduced the agreement of adjectives of color with the noun, the students created a 3D Venn Diagram with Hot Wheels cars of different colors to figure out the different rules by themselves (green is vert or verte, but orange is always orange, blue is bleu or bleue, but the pronunciation is not altered).

Themes such as animals, food, transportation, family, our playground, weather, and calendar vocabulary have been covered. After seeing the third-graders' pictures with posters and identifying sentences, the first-graders spontaneously decided to make posters with the night routine! While some students' contributions were sentences such as "I read" and "I go to bed," others gave it a humorous twist with sentences like "I sleepwalk," "I fish on the moon," "I eat in my sleep" and "I talk in my sleep."



First grade favorite: *Je ne suis pas ta maman*

A new addition is Friday dictation. We practice a simple sentence with words from Symtalk. The dictation is now sent home on Friday for the student to study over the weekend.

Concurrently, a large part of the class is dedicated to the development of oral language. The students learned several songs, practiced greetings, introduced themselves on a daily basis, and used vocabulary to communicate during make-believe games or show-and-tell.

I also read a new book every week. One of the class favorites is *Je ne suis pas ta maman* (I am not your mother). Books allow us to teach sentence structure and vocabulary, such as animals, family members, nature, etc. The students became familiar with the verb "to be" in the first-person and negative forms. The students then took turns excitedly saying "I am not ____, I am ____."

In reading, we practiced the recognition of vowels, speaking the sound with the correct pronunciation, and reading syllables and words from Symtalk. In the coming weeks, we will learn the vocabulary of body parts and revisit family-related words.

Subject: Science

Teacher: Mr. Darer

In first-grade science, we began the school year by asking the question “what weighs more, a whole cookie or the same cookie crumbled up?” After a class discussion, we set up a scale with a cookie on it to help answer this question and found out that they both weigh the same amount. We then learned about monarch butterfly migration to Mexico in the wintertime. We came up with the big question: how do butterflies know which way to fly to head south? To answer this question, we began our unit on magnetism. The students explored the properties of magnets and learned about magnetic fields through demonstrations and free play with magnets, paper clips, pennies, and iron filings. They learned terms such as attract, repel, magnetic field, and magnetic field lines. We figured out that the butterflies use the magnetic field lines of the earth to help determine which way to fly south.

After several lessons on magnetism and magnetic fields, the first-grade class built their own compass by magnetizing a paperclip and floating it on a small plastic square in a cup of water. The paperclip aligned with the earth’s magnetic field and pointed north.



Henry Winfield is holding a piece of coal, not native to this area (which is why it's exciting), but probably an artifact from people who lived here before the school was built

We next asked the questions: “what does a cloud look like? Do all clouds look the same? How do clouds form? and Where do they go on sunny cloudless days?” We explored these questions by reading a book about clouds and learning about cumulus, stratus, cirrus, and cumulonimbus clouds. We had some great class discussions and learned a song about the water cycle to help answer our original questions.

Subject: Hands-On Skills

Teacher: Mr. Darer

In Hands-On Skills class, we have made several trips to the school garden where the students have harvested kale, radishes, chickweed, and lemon clover (wood sorrel). We have also been practicing identifying trees around the school based on their leaf shapes. We discussed characteristics of the leaves

that can help us tell them apart. The students have learned to identify Beech, Eastern Redbud, Oak, Black Walnut, Red Maple, Eastern Hemlock, Sassafras, Dogwood, Sugar Maple, Cedar, Pine, Spruce, and Tulip tree leaves.

We have also learned how to tie different types of knots. The class can now tie an overhand knot and figure eight knot. Some students are even able to tie these knots behind their backs! We also discussed the uses of these types of knots. Stopper knots (overhand, figure eight) are tied at the end of a rope to prevent the rope from slipping through a small opening. We also have been observing birds that come to the bird feeders at school and learning to identify birds based on their physical characteristics. The students have learned to identify most of the following birds: white-breasted nuthatch, robin, cardinal, blue jay, house sparrow, song sparrow, bald eagle, crow, black-capped chickadee, and turkey vulture.

Subject: Art

Teacher: Mrs. Butterworth

During art classes we build the students' confidence as artists by teaching them to find the easy way to draw difficult objects. They always observe carefully first, identifying the simple shapes in complicated objects, and then look for details that will make their pictures more interesting. The students are learning more about the rules of perspective, using size, placement on the page, color and intensity to make some objects look closer than others. It is a pleasure to see how after certain topics kids repeat those pictures by themselves.

Subject: Violin

Subject: Mrs. Butterworth

With a few new students in class, we started this fall by learning/refreshing how to hold the bow and the violin, how to act as a team, and how to follow the instructions. We also dedicated time to bowing, playing rhythms on open strings. I create different melodies with the same rhythms, and the students have to play in the same direction and recognize whether my melody is in major or minor. Now that the



Mrs. Butterworth leads first grade violin ensemble

students can play with all 4 fingers, we have five short songs/patterns and three real songs with accompaniment. They practice playing both in a group and solo.

Subject: Music Theory
Teacher: Mr. Anthony

For this class we reinforced and added on to some of the basics such as note-reading, playing octaves and chords on the piano, and singing different intervals using solfege. I also gave them some very basic dictation work, where they were writing down the notes they heard me play on the piano. This skill is a challenge for any age group, so I played some very short, simple patterns of notes. The students asked lots of questions, wanting me to play the notes over and over again. When I pointed out some of the things they got wrong, many were curious to hear what the note they wrote down sounded like in comparison to the correct notes. When I proceeded to play their dictations, it evoked some friendly laughter in many cases, but also I could see that they were making connections between the page and the sounds they were hearing. Some of the students were able to erase what they had written and come up with the correct notes. Another highlight for the students was the chance to see the inside of the upright piano. They were asking questions about how the right pedal works on the piano, so I removed the front panel so they could see the inner workings, while I explained about the strings, hammers, dampers, and pedals. Everyone enjoyed seeing the hammers move while I played fast passages of notes.

Second Grade

Subject: Math

Teacher: Dr. Fradkin

The second graders started the year in math class by deepening their understanding of place value. How can we quickly add 1, 10, or 100 to a number? What number is the same as 77 tens? What about 77 ones? All of these questions and explorations were building the foundations for developing good number sense and coming up with efficient computation strategies.

The second unit of second-grade math was on comparing 3-digit numbers. We started by exploring the number line: labeling missing numbers and finding the distance between numbers. The students then solved many problems on putting numbers in order from least to greatest and from greatest to least. They then worked on many puzzles that truly tested the depth of their understanding.

The final second-grade math unit of the trimester was on 2 and 3-digit addition. The students explored many strategies for adding numbers that deepened their understanding of the process and of our number system. First, they learned the more traditional method of adding, using the concept of place value. They then added numbers using the number line, by thinking of the numbers as balls that can be transferred between bins, and by making the numbers “friendly” and round and then adjusting the answer. They also looked for ways to rearrange or pair up the numbers when adding more than two of them. For example, they came up with two different ways of computing the sum $21+22+23+24+25+26+27+28+29$: one by pairing them up to make 50's $(21+29)+(22+28)+\dots$, and another one by adding all the 20's first, then all the ones, and finally adding the two sums to each other.

Subject: English

Teacher: Ms. Woo

The second grade meets four times a week for English. During these class times, we have been working hard on the following six facets of the English language: reading, writing, poetics, grammar, phonics (spelling), and penmanship.

For reading, the students read one to two short stories or poems per week and answered comprehension



Second graders Calvin Krellner-Oathes, Abdul-Qadir Sonntag, Elise Sigelman, and Bahar Kemiktarak work on their silent reading skills.

questions based on the reading. We learned to read silently and out loud.

This trimester, we memorized three poems: "The Purple Cow" by Gelett Burgess and "Gathering Leaves" by Robert Louis Stevenson, and "Bitter for Sweet" by Christina Rossetti. We also learned about iambic and trochaic meter, rhyme, and stanzas.

We grew in our knowledge of English grammar, spelling, and penmanship. We learned how to add punctuation to the end of the sentence, make nouns plural, and make verbs singular. Each week we also learned a new group of words that all share the same characteristic sound (phonics). We practiced our penmanship during class as well and are working hard to write in cursive neatly and correctly. Every week also included a dictation in which I read aloud five sentences for the students to write. They were graded on accuracy, spelling, punctuation, and handwriting.

Subject: Story Time

Teacher: Ms. Woo

The second grade meets twice a week for Story Time. On Wednesdays and Fridays, the students listened while I read *Mr. Popper's Penguins* by Florence Atwater and Richard Atwater, *Beowulf*, *Dragon Slayer* by Rosemary Sutcliff, and *The Hundred Dresses* by Eleanor Estes. We reinforced the stories by having discussions, playing review games, and making various crafts.

Subject: History

Teacher: Mr. Chilbert

MLCA takes Greco-Roman culture very seriously—so seriously that the second graders get to enjoy the distinct privilege of studying Ancient Rome for an entire year! So who are the Romans and why do we think they are so worth our attention? In order to begin answering this question, we began our journey far to the east of Rome and even further east than Greece. It was in Troy that the story of Rome began, so this is where the second-grade set sail in September. We arrived in the wake of a terrible war and with the backdrop of a burning citadel. Prince Aeneas led two people to the safety of the ships that would carry with them the future of Rome: his father Anchises on his back and his son Iulus held by the hand. This image brings us closer to the answer of why we love the Romans. It sheds light on the story we wish to embody for ourselves as students, as teachers, as a school, and as a country. We owe an extraordinary amount to those who have come before us, and so we also owe the same amount to those who come after.

The story of Rome is far from being perfectly honorable, however. We have encountered kind shepherds as well as vengeful brothers. We have heard stories of honor, heroism, and divine destiny, but also of envy, deceit, and treachery. Most recently, we covered the monarchical period of Rome's history which, as a form of government, became so corrupt that the Romans vowed to never return to it. In the second trimester, we will discover and explore the achievements of the Roman

Republic. We will encounter international powers in the Punic Wars. We will even catch a glimpse of another dramatic shift of governmental power after learning what we can about a budding Provincial leader by the name of Julius Caesar.

The second-graders all boast knowledge of the names of the Latin gods, the seven Kings of Rome, and several details of the early Roman government. As the Roman Republic becomes more established, we will take a closer look at daily life in Rome as well as the architectural intricacies of their capital city.

Subject: French

Teacher: Mme. Trudeau

Second graders are turning the corner from the discovery stage to a stage of deeper knowledge of the French language that includes studying oral and written production, as well as reading and oral comprehension. Since the beginning of the year, second



Isaac Martinson leads the class through the days of the week song with the help of Madame Trudeau

graders have been not only reviewing and solidifying their knowledge, but also polishing previously-taught lessons. For example, they reviewed counting, while increasingly gaining fluency with the numbers 1-20, both in speaking and writing. Those skills will help them remember how to speak and write 1-50 over the course of the school year.

The second-graders studied Unit 1 in Les

Loustics 1. They improved their oral comprehension by listening to dialogues and matching pictures to audio recordings. They learned to fluently talk about themselves. What is your name? How are you? How old are you? How many ____ do you have? What are/is you/he/she doing? What do you like to do? Unit 1 introduced the second-graders to asking questions and having conversations with their classmates. That indicates they have been not only repeating, but also understanding what they ask and what is asked. That is a big step! Unit 2 introduced second-graders to school furniture and how to ask for something they need and talked about school life.

In addition to Les Loustics, they learned action verbs and the use of the verb "to play" to talk about emotions, activities, and sports they enjoy doing, as well as new

adjectives. Second graders also studied the verbs “to be” and “to have” in the first, second, and third person, as well as practicing using the different pronouns. The students also learned which adjectives to use with “to be” versus “to have.”

In reading, the reading fluency and French phonics knowledge of the second grade was assessed. They practiced reading syllables and words with the vowels with the correct pronunciation. They completed a review of the vowels and we started with complex sounds of two-letter combinations.

In addition, we read a new book every week, followed by a sentence structure activity. A favorite is *Ce n'est pas mon chapeau*. In third grade they will practice using the sentence starter *C'est _____, ce n'est pas _____* (It is __, it is not __).

The students also learned songs and are working to memorize the fable *Le corbeau et le Renard* by Jean La Fontaine.

Subject: Science
Teacher: Mr. Darer

In second-grade science, we began the school year by working on an engineering design challenge to build a bridge that will hold up the most pennies using only ten pieces of paper, twenty straws, two popsicle sticks, and fifty centimeters of tape. The students worked in groups to sketch and build their bridges. The strongest bridge the students built held over two hundred and fifty pennies. We discussed why some bridges were able to hold up more pennies than bridges and looked more closely at the design factors that improved a bridge's strength. We next studied the leaves of trees that grow around the school and learned vocabulary words such as simple leaf, compound leaf, vein, and petiole. The students made leaf rubbing from various types of leaves collected from around the school and labeled their drawings with the appropriate vocabulary words.



Elise Sigelman and Luca Grigoli work diligently on their project.

We then reviewed the directions that the sun rises and sets each day as well the direction of our shadow during sunrise, noon, and evening. We also learned that our shadows are longest during sunrise and sunset, and shortest at noon. We then studied different types of sundials and the students built their own sundials to tell time using shadows. We are now exploring potential and kinetic energy and are finishing a project to harness these energies to launch q-tips.

Subject: Hands-On Skills
Teacher: Mr. Darer

In Hands-On Skills class, we have made several trips to the school garden where the students have harvested kale, radishes, chickweed, and lemon clover (wood sorrel). We have also been practicing identifying trees around the school based on their leaf shapes. We discussed characteristics of the leaves that can help us tell them apart. The students have learned to identify Beech, Eastern Redbud, Oak, Black Walnut, Red Maple, Eastern Hemlock, Sassafras, Dogwood, Sugar Maple, Cedar, Pine, Spruce, and Tulip tree leaves.

We have also learned how to tie different types of knots. The class can now tie an overhand knot and figure eight knot. Some students are even able to tie these knots behind their backs! We also discussed the uses of these types of knots. Stopper knots (overhand, figure eight) are tied at the end of a rope to prevent the rope from slipping through a small opening. We also have been observing birds that come to the bird feeders at school and learning to identify birds based on their physical

characteristics. The students have learned to identify most of the following birds: white-breasted nuthatch, robin, cardinal, blue jay, house sparrow, song sparrow, bald eagle, crow, black-capped chickadee, and turkey vulture.

Subject: Art
Teacher: Mrs. Butterworth

During art classes we build the students' confidence as artists by teaching them to find the easy way to draw difficult objects. They always observe carefully first, identifying the simple shapes in complicated objects, and then look for details that will make their pictures more interesting. The students are learning more about the rules of



A collection of second grade art

perspective, using size, placement on the page, color and intensity to make some objects look closer than others. It is a pleasure to see how after certain topics kids repeat those pictures by themselves.

Teacher: Mrs. Butterworth

Subject: Violin

During this trimester, Second Graders worked with 2 songs, "Perpetual motion" from the Suzuki book and "Mazurka" by N. Baklanova. Perpetual motion has simple bowing, only high 2nd finger and sequences, so the students can focus on position, sound and intonation. Mazurka has a more complicated melody and contains high and low 2nd finger, slurs and harmonics.

Subject: Music Theory

Teacher: Mr. Anthony

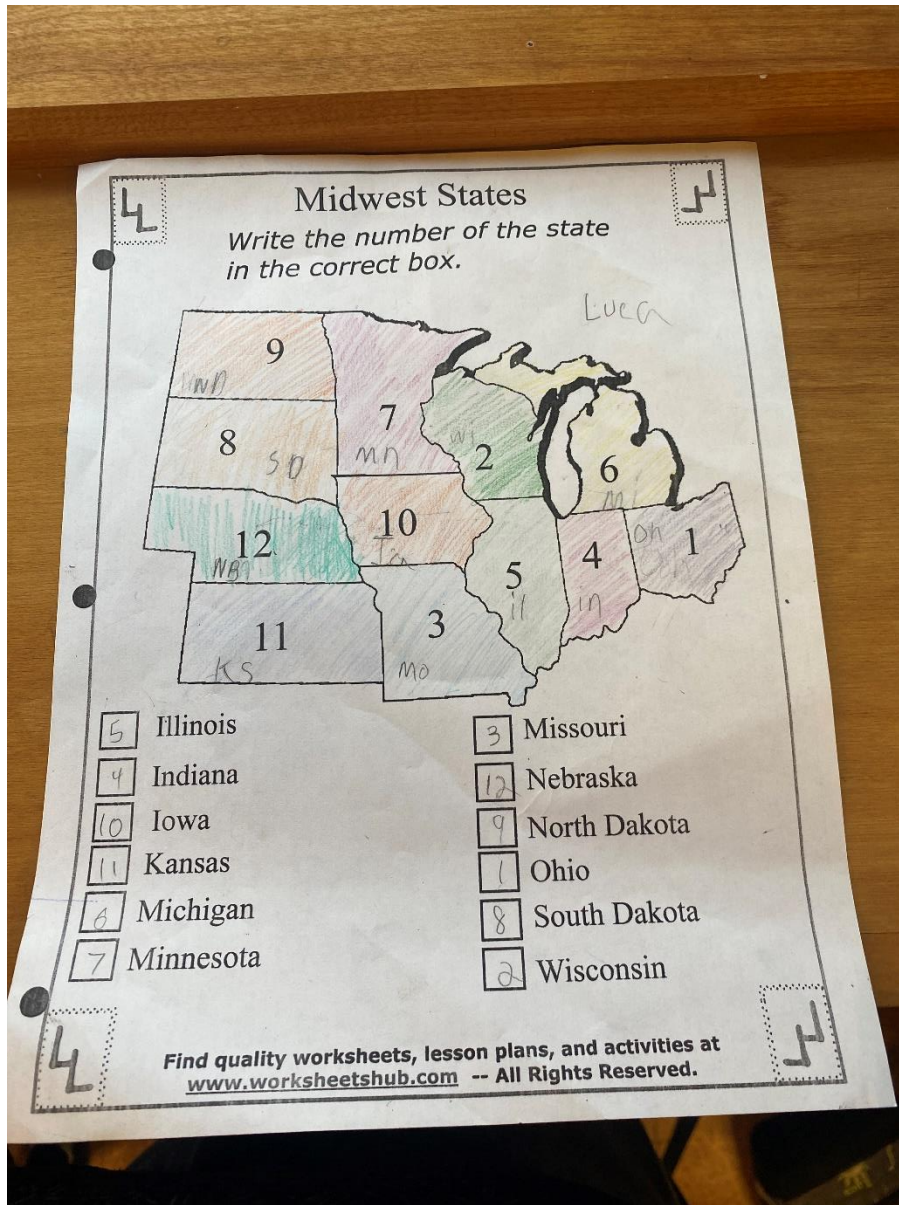
In second grade, I am working with students on more advanced reading skills and recognizing treble and bass clef notes using flash cards. I am giving them more involved tasks to try at the piano, such as spelling a major or minor triad from any of the white notes on a piano. Since they were always asking to try out their piano pieces for the class, I also worked with them to play through their entire piece without stopping, and techniques they could use to just keep going if they make a mistake (so they don't say "I forget" and stop playing). We reviewed solfege syllables and went over the different syllables used for singing in minor (Mi changes to Me and La to Le). During one class, I gave the students a theme to sing ("Row, Row, Row Your Boat") with two overlapping groups of kids to illustrate canon form. For the first several tries, the second group ended up reverting to singing with the first group, or vice-versa. After I explained the necessity of maintaining their own part while keeping track of two parts simultaneously, they tried again and pulled it off quite successfully. I felt that through this activity, and by hearing examples of canons by Bach being played on the piano, they gained a new appreciation for this form of music.

Subject: Geography

Teacher: Mrs. Gandy

Understanding geography isn't just about memorizing locations on a map; this subject is a helpful tool for exploring the places around us. Geography also helps students understand history through an additional method. For the first trimester, we took some time to review some essential geography elements. We made a human-made compass rose to allow each student to stand in as a directional point of the compass. We started by learning about the seven continents, the major oceans, and where each was located. Every week we took five minutes to review the continents and oceans to make sure they weren't forgotten. After learning these geography features, the second-graders focused on where things were in the United States. Each week the students learned about one of the regions in the United States. There are five regions

they were introduced to. Once the class learned the states in each of the five regions, the second-graders acquired the understanding that each state has an abbreviation for its name and they learned those abbreviations. Many students were surprised that the abbreviations weren't as obvious as they thought. All five United States regions were completed by the end of the first trimester.



Luca Grigoli labels the Midwest!

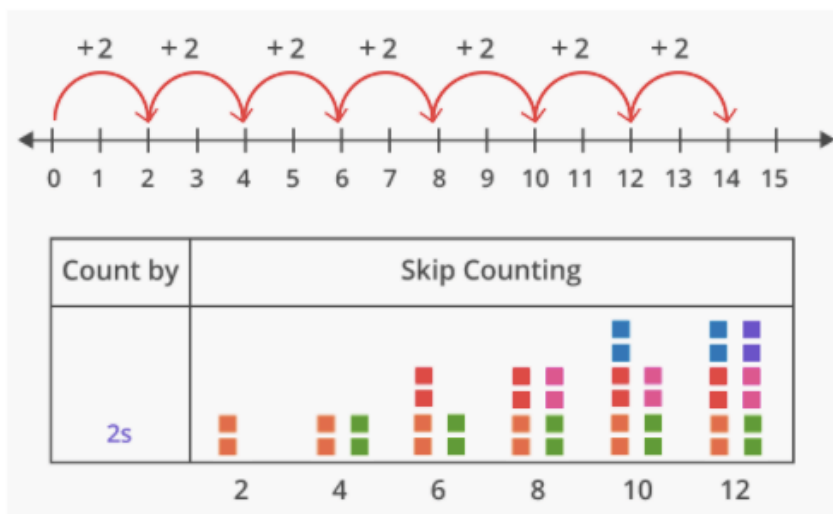
Third Grade

Subject: Math

Teacher: Dr. Fradkin

The first month of third-grade math was all about shapes. We focused in particular on closed ones with straight sides, called polygons. The students first learned about three types of angles (acute, obtuse, and right) and then moved on to triangles, which they learned to identify by their angles as well as by their sides (equilateral, isosceles, and scalene). Quadrilaterals, polygons with four sides, proved even trickier to classify. The students learned that all squares are rhombuses, but not all rhombuses are squares. The squares are exactly those quadrilaterals that are both rectangles and rhombuses. At the end of the unit, students solved puzzles involving tetrominoes (shapes made out of 4 squares) and toothpicks.

The second unit in third-grade math was on skip counting. Skip-counting not only lays



A skip counting demonstration

the foundation for multiplication, but also encourages students to look for patterns and ask questions about why they are there. For example, why do you only say numbers that end in even digits when you skip count by an even number (and only odd ones if you start the skip counting at an odd number)? Why does the ones digit repeat every 10 numbers when skip counting by 3, 7 or 9 (regardless of

where you start from!)? The questions and patterns are endless and exploring each one leads to a slightly better understanding of numbers.

Finally, the third unit of the first trimester dealt with the concepts of Perimeter and Area. The students solved many problems involving the concepts. They discovered that a shape with a bigger perimeter will not always have a bigger area. Most of the focus was on rectangles and rectilinear shapes (those that can be divided into rectangles). The students explored what happens to the perimeter or area of a rectangle when its height is increased by 1, or some other fixed amount. They also learned and discovered many tricks for finding the perimeter of rectilinear shapes that are not rectangles.

Subject: English
Teacher: Ms. Woo

The third grade meets five times a week for English. We are working on mastering the following six facets of the English language: reading, writing, poetics, grammar, spelling/vocabulary, and penmanship.

Every week we complete a dictation exercise wherein I read aloud five or six sentences for the students to write. They were graded on accuracy, spelling, punctuation, and application of grammar rules we learned the previous week. I also looked for improvements in handwriting.

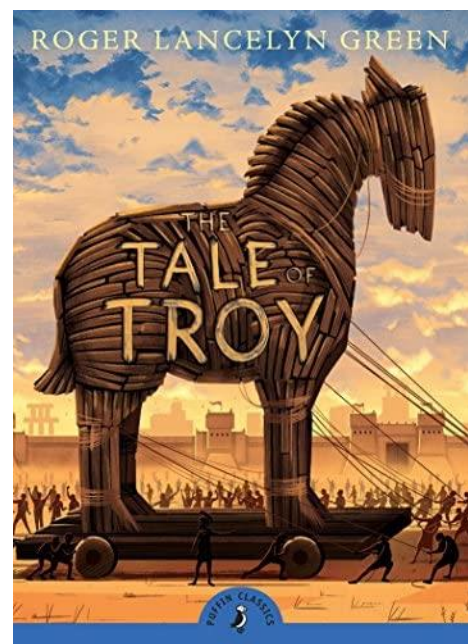
For reading, the students read one to two short stories or poems per week and answered comprehension questions based on the reading. The students are learning how to answer questions more accurately and read more carefully. On Wednesdays, students spent twenty to thirty minutes free writing. They are wonderfully creative and have fun writing their own stories.

This trimester, we memorized three poems: "If All Were Rain" by Christina Rossetti, "Afternoon on a Hill" by Edna St. Vincent Millay, and "I Remember, I Remember" by Thomas Hood. The students also reviewed iambic vs. trochaic meter and rhyme.

Lastly, we grew in our knowledge of English grammar, spelling, vocabulary, and penmanship. We learned how to use quotation marks, when to use capital letters, and how to make nouns plural. Each week we also learned a new group of words that all share the same characteristic sound (phonics). Students memorized twenty-four spelling words every month. We also practiced our penmanship during class and are working hard to write in cursive neatly and correctly.

Subject: Story Time
Teacher: Ms. Woo

The third grade meets twice a week for Story Time. On Mondays and Fridays, we have Story Time and read through *The Tale of Troy* by Roger Lancelyn Green as a class. We reinforced the story by playing review games and making costumes and crafts. At home, students read *My Side of the Mountain* by Jean Craighead George. Every few weeks, we discussed a chunk of the reading during class



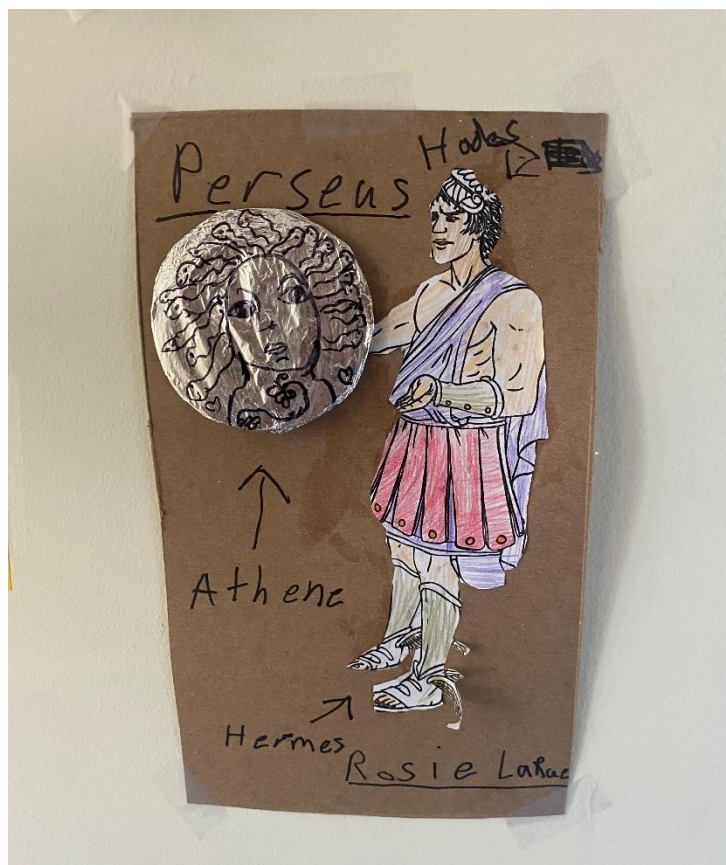
The third graders' edition of *The Tale of Troy*

Subject: History
Teacher: Mrs. Gandy

What is a hero? In third grade, we defined it as a person who is admired or idealized for courage, outstanding achievements, or noble qualities. Are there specific characteristics that define a hero? Yes, and some of those characteristics surprised the third-graders. Does a hero have faults? Definitely, and the class learned that early on through ancient Greek hero myths. Each hero that was read about shined a little more light on the answers we were searching for. Prior to jumping into the myths during each class, the third graders would learn a new Greek letter. After writing down the letter each student accurately wrote down the uppercase and lowercase versions of the letter in their history journals. This would be followed by standing up to recite all the Greek letters they have previously learned. Most days it would be a

competition of who could raise their hand first allowing them to be the first student to recite the Greek alphabet.

After the intro activity, we would then discuss the Greek hero of the week digging deeper to answer the above questions. Each student would jot some notes down in their history journals, and hopefully have time for a craft. The craft would allow the students to connect to the myth on another level. The Greek myths the third graders were able to explore were Jason & the Golden Fleece, Theseus & the Minotaur, Perseus, Orpheus & Eurydice, and The Death of the Chimera. Through these myths, the third graders noticed that Greek heroes have physical strength, overcome challenges, use their wit to solve problems, have something to prove, and have a creative side



Rosie LaRue's *Perseus*

whether it's with music, poetry, or singing. Also, sometimes these heroes can allow their emotions (love, eagerness, or impatience) to overcome them, which led the heroes to make a misjudgment. To conclude their understanding of Greek myths, the third-grade students created their own mythical creature, which is an integral part of Greek myths. They were then divided into two groups to create a group myth with the requirement of using their own mythical creatures, a Greek hero we learned about, and some Greek locations we were introduced to.

Subject: French

Teacher: Mme. Trudeau

Since the beginning of the year, the third graders worked on their oral language, as well as the vocabulary and knowledge of French they had previously acquired to date. One highlight is our French challenge, which is French-only interaction with point deductions when English is spoken. It is done in an atmosphere of camaraderie, but the students are competitive amongst themselves! They filled in different graphic organizers to help them practice introducing themselves and their friends.

The third graders studied Unit 1 of Les Loustics 2. Les Loustics offers opportunities to learn new vocabulary and practice spelling, as well as asking and answering questions. The students learned about telling time and the morning routine. The students enjoyed taking pictures of themselves, performing a part of the morning routine, and then labeling it. They reviewed school furniture, learned emotions and moral characteristics (*curieux, gentil*), how to talk about where they are from, and school subjects. In Unit 2, third graders learned the vocabulary of extended family.

Third graders also learned the accurate use of genre agreement, along with colors and adjectives. The students learned about using *vous* (plural of you) for the polite form. They also studied the verbs "to be," "to have," "to go," "to like" and "to learn" with all the pronouns and reflexive verbs.

Third graders also read short texts and learned how to read and spell with *e, é, è, ê*, and more complex two-letter sounds, such as *ou (u)*. We are reading *La cigale et la fourmi* by Jean La Fontaine.

In addition, we read a new book every week, followed by a sentence structure activity. A favorite is *Ce n'est pas mon chapeau*. Third-graders practice using the sentence starter *C'est _____, ce n'est pas _____* (It is ____, it is not ____).

Subject: Science

Teacher: Mr. Darer

In third-grade science, we began the school year by reading a recounting of how Archimedes determined if a king's crown was made of pure gold or if it had silver inside of it. Through demonstrations and class discussions we learned about density and volume and then showed that since gold and silver have different densities, a crown with silver in it would displace more water in a jar than a pure gold crown of equal weight. We then determined the volume of one penny by measuring the amount of water it displaced in a graduated cylinder. Next, we explored the causes of Earth's seasons by studying four globes positioned around a lightbulb in the classroom and noticed whether the light was shining more directly on the northern hemisphere, southern hemisphere, or the equator during the equinoxes and solstices.

We next studied the leaves of trees that grow around the school and learned vocabulary words such as simple leaf, compound leaf, vein, and petiole. The students made leaf rubbing from various types of leaves collected from around the school and labeled their drawings with the appropriate vocabulary words. We have been reading a picture book about scientists and how they collected, organized, analyzed, and presented their data. From here, we began our own project to document the animals on the discovery trail in order to figure out which animal is most common. The students set up a trail camera and have been tallying the different types of animals in their notebooks. They are using this data to make a bar graph to compare the abundance of different animal species that live in the discovery trail. We also discussed food webs and producers, consumers, and decomposers, and will be making a food web of the animals that we see on the trail camera videos.

Subject: Hand-On Skills

Teacher: Mr. Darer

In Hands-On Skills class, we have made several trips to the school garden where the students have harvested kale, radishes, chickweed, and lemon clover (wood sorrel). We have also been practicing identifying trees around the school based on their leaf shapes. We discussed characteristics of the leaves that can help us tell them apart. The students have learned to identify Beech, Eastern Redbud, Oak, Black Walnut, Red Maple, Eastern Hemlock, Sassafras, Dogwood, Sugar Maple, Cedar, Pine, Spruce, and Tulip tree leaves.



Third grade pen and ink drawings of tigers.

We have also learned how to tie different types of knots. The class can now tie an overhand knot and figure eight knot. Some students are even able to tie these knots behind their backs! We also discussed the uses of these types of knots. Stopper knots (overhand, figure eight) are tied at the end of a rope to prevent the rope from slipping through a small opening. We also have been observing birds that come to the bird feeders at school and learning to identify birds based on their physical characteristics. The students have learned to identify most of the following birds: white-breasted nuthatch, robin, cardinal, blue jay, house sparrow, song sparrow, bald eagle, crow, black-capped chickadee, and turkey vulture.

Subject: Art

Teacher: Mr. Murdoch

The first semester of the year is designed to make important foundational skills and

concepts of art clear in the pursuit of accurately drawing what one sees. It is also meant to lay the groundwork for more complicated skills and subjects we will be exploring in the remaining trimesters.

So far we have explored the art and practice of drawing. We have explored shape, proportion, underlying pattern, value, parts of shadow, silhouette, and positive and negative shapes. We have also been exploring how to work in layers and when to apply techniques in the picture-making process. Students have drawn a variety of subjects from photo references, class set-ups, or old master references including still-life, animals, seashells, and landscapes.

Materials students have used include pencil and pen and ink. In addition, I try to show examples from old masterworks that follow in the Western European tradition of picture-making.

I am pleased to report that the concepts are beginning to become ingrained in the class. The students have done some very developed drawings and displayed the ability to achieve further success as we continue in the remaining trimesters.

In a new exercise this year, students were asked to work in groups and repeat the steps of the drawing process as they understood it. They did well and are on their way to becoming conversant in the language of drawing and painting. Also new this year was a pen and ink exercise where students drew first in pencil. Next, they did an ink drawing over the pencil drawing and erased any remaining pencil lines so it looks like a clean, professional ink drawing. Lastly, each month one student is designated a class helper and gets to pick one of the references that the class will draw in the coming lessons.

Subject: Music Theory

Teacher: Mr. Anthony

Since third grade is the highest grade that I teach, my hope and expectation for these students was that they could handle significantly more advanced material than their younger counterparts, and I can say they absolutely can! In the second or third class, a student asked me if a piano piece I played used the harmonic minor scale, so we discussed the difference between harmonic and melodic minor. Another student asked, "Is a C-sharp the same as a D-flat?" prompting a discussion of how naming a note a certain way is an important distinction and denotes a specific function of the note. Spelling major and minor chords at the piano were easy for everyone, so I taught them how to play scales, including the very popular whole-tone scale. There are only two different ways to play a whole-tone scale on the piano. I taught them to start on C and play three white notes, then three black notes alternating hands passing one hand over the next going up the keyboard. We discussed how it is frequently used by Debussy. They all loved the sound of it and wanted to practice it until they got it to sound beautiful and mysterious. I also would play music for them as they learned to distinguish the music of different periods, Baroque, Classical, and

Romantic. After they heard some of the Neo-Romantic repertoires by Rachmaninoff, they assailed me with the request to “play it faster!”, which I was always happy to indulge.



Mr. Anthony shows the third grade the inner workings of a piano.

Subject: Geography
Teachers: Mrs. Gandy

Knowing where things are on a map helps one to understand and connect to the stories in history and the world around us. For the first trimester, we took some time to review some essential geography elements. The students confidently showed me that they knew the seven continents, the major oceans, and where each was located. We also reviewed the directions of a compass rose and made sure they were confident in it. After reviewing these geography features, the third graders focused on where things were in the United States. Each week the students learned about one of the regions in the United States. There are five regions they were introduced to. Once the class learned the states in each of the five areas the third graders acquired that knowledge of the capitals of each state and the state's abbreviations.

To complete everything, the class learned each student had to put the United States back together like a puzzle. Every student received a bag with fifty cut-out states. They had to sort the states into their proper region and color-code them. The final step of the activity was to put the states back together to form the entire United States of America. Putting together fifty individually cut states like a puzzle proved to be a bit more difficult than the class anticipated. While they came to a staggering

Fourth Grade

Subject: Math

Teacher: Ms. Ter-Saakov

The fourth grade has successfully completed the 3D Beast Academy book. Students explored the fractions, making connections between various size plastic “pizza slices”, and points on the number line. The concept of equivalent fractions was introduced. We continued to the chapter on Estimation, learning to eyeball our answers. The last chapter of book 3D was devoted to finding the area of triangles and rectilinear shapes. Students were using proper measuring units and even worked through some unit conversion problems.



Fourth grader Asha Ponnuru focuses on Mrs. Ter-Saakov's lesson.

Book 4A is exposing students further to geometry. Probably the most challenging part was mastering the use of a protractor. It was not easy for students to keep track of aligning the vertex of the angle, one of its sides, and selecting the right scale to read. Exploring line and rotational symmetry towards the end of the chapter feels like a well-deserved award.

Subject: English

Teacher: Ms. Woo

The fourth grade meets five times a week for English. This trimester we worked on building vocabulary using stems, analyzing sentences, reading and comprehending *Puck of Pook's Hill* by Rudyard Kipling, and learning various poetic devices.

On Mondays, we worked on building English vocabulary by learning the Latin stems “re,” “sub,” “de,” and “ex.” We explored words that derived from these stems by looking words up in the dictionary and creating lists of words that contain the stems.

On Tuesdays, we dug deep into English grammar. By the end of the trimester, students were able to analyze whole sentences, labeling each word in the sentence with the appropriate part of speech (noun, verb, adjective, etc.) and part of the sentence (subject, predicate, direct object, etc.). Students also learned to identify clauses and prepositional phrases.

On Wednesdays, we spent time discussing one chapter of *Puck of Pook's Hill* by Rudyard Kipling. We focused on comprehension, the historical background of events

described in the book, characters' decisions and consequences, and writing plot summaries.

On Thursdays, we studied how sounds are used as building blocks in poetry to create rhyme and alliteration. We spent time composing our own poems and also memorized "What Are Heavy?" by Christina Rossetti and "Puck's Song" by Rudyard Kipling.

On Fridays, we took a short quiz about what we learned that week and spent more time reinforcing Tuesday's grammar lesson with practice.

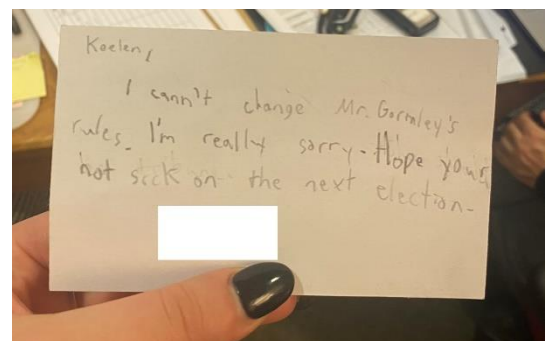
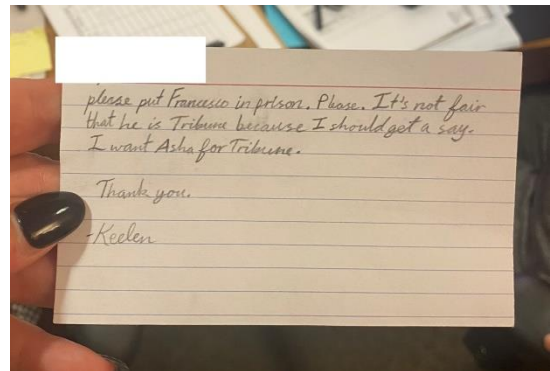
Subject: History
Teacher: Mr. Gormley

Fourth grade began the year with Titus Livius' account of the founding of Rome, starting with the origins of Romulus, who with the help of his brother Remus liberated their grandfather to rule Alba Longa. We then proceeded to discuss the bloody beginnings of the founding of the city involving fratricide, through the taking of the Sabine women, to Romulus' mysterious demise. This was very likely an assassination by several angry senators, according to Livy. We then worked our way through the remainder of the ancient monarchy and to the founding of the republic, also rather bloody by Livy's account. We'll soon be moving on to the early days of the republic, the expansion to nearly the whole of the Italian peninsula, the invasion of Pyrrhus, and the wars with Carthage.

We also take five minutes every so often to enact our own version of a "Roman Senate." Students drew lots to decide whether they'd be in the upper or lower class (while Carmina Burana played in the background). One might have thought their entire fate was to be decided from that one instance, given the seriousness with which they undertook it. That will continue through the year.

Subject: French
Teacher: M. Portier

This trimester the fourth graders worked on different ways to ask a question, the partitive articles, and the near future. We advanced much further in reading the novel *Rémi ou le Mystère de St Péray* than we anticipated. We have arrived at the moment



Keelen Cooke submits an official complaint to her classmate regarding the Senate, proving it's never too early to get involved in government.

in this adventure novel when the main characters discover the hidden cave of the smugglers. The students also practice their listening and speaking skills with audio documents about one of our main topics this year "introducing oneself". I look forward to advancing in the reading of our novel as well as exploring its different themes through French conversation together.

Subject: Science

Teacher: Mr. Darer

In fourth-grade science, we began the year by designing and building a vessel that can safely prevent an egg from cracking when dropped out the back window of the school. The students sketched their designs and then used the limited materials supplied to build their projects. Some groups used balloons to cushion the fall and slow down the egg drop vessel, while others built newspaper parachutes. We dropped the eggs out the back window of the science classroom onto the ground below (around 20 feet) and all of the eggs survived the impact. We then used this introduction into design and engineering to begin discussing Newton's laws of motion. Through demonstrations, worksheets, and class discussions, we explored Newton's three laws. To study the first law, for example, students observed how a penny resting on an index card covering a cup will fall into the cup when the index card is pulled out from under the penny.

We also learned about force diagrams, balanced, and unbalanced forces, and different pulley systems and determined the mechanical advantage of the different pulley configurations. The students then lifted a heavy backpack with ease by using a block and tackle pulley made out of six pulleys. The students also analyzed different graph patterns (linearly increasing, stable, linearly decreasing, and oscillating) and had to match up statements to the corresponding graph.

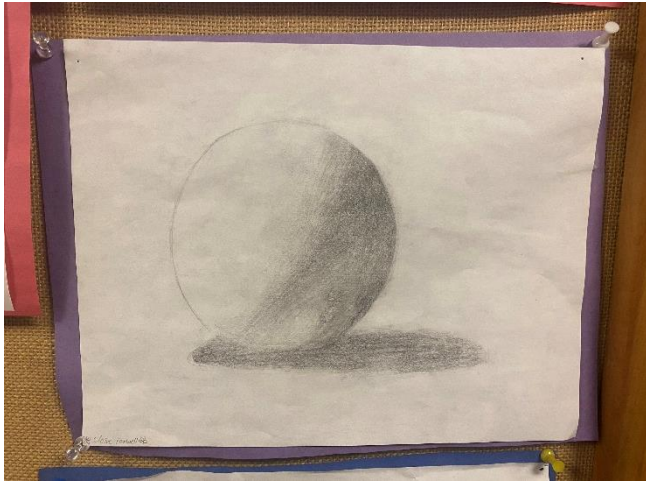
Subject: Art

Teacher: Mr. Murdoch

The first semester of the year is designed to make important foundational skills and concepts of art clear in the pursuit of accurately drawing what one sees. It is also meant to lay the groundwork for more complicated skills and subjects we will be exploring in the remaining trimesters.

So far we have explored the art and practice of drawing. We have explored shape, proportion, underlying pattern, value, parts of shadow, silhouette, and positive and negative shapes. We have also been exploring how to work in layers and when to apply techniques in the picture-making process. Students have drawn a variety of subjects from photo references, class set-ups, or old master references including still-life, animals, seashells, and landscapes.

Materials students have used include pencil and pen and ink. In addition, I try to show examples as appropriate from old masterworks that follow in the Western European tradition of picture-making.



Pencil drawing of a sphere by Claire Farwell.

I am pleased to report that the concepts are beginning to become ingrained in the class. The students have done some very developed drawings and displayed the ability to achieve further success as we continue in the remaining trimesters. In a new exercise this year, students were asked to work in groups and repeat the steps of the drawing process as they understood it. They did well and are on their way to becoming conversant in the language of drawing and painting. Also new this year was a

pen and ink exercise where students drew first in pencil. Next, they did an ink drawing over the pencil drawing and erased any remaining pencil lines so it looks like a clean, professional ink drawing. Lastly, each month one student is designated a class helper and gets to pick one of the references that the class will draw in the coming lessons.

Subject: Latin
Teacher: Mr. Cialini

In their first year of Latin, the fourth grade began working through *An Introduction to Languages* which reviews the foundational concepts of language such as parts of speech, syntax, and how inflectional endings change for English words. In seven weeks we covered proper, common, concrete, and abstract nouns; verbs and verb phrases, infinitives, helping verbs; adjectives, adverbs, articles; subjects and predicates, prefixes and suffixes, and roots of words; inflections and inflectional endings for verbs and nouns; and agreement of simple subjects and verbs.

In the early chapters, the text anticipates students' study of Latin by illustrating that the root of many English words are derived from Latin. For instance, the root spect is derived from the Latin verb *specto, spectare* which means "to look at" or "to watch." Thus, words such as *spectate, inspect, spectacle, introspection, circumspection, etc.* each have their origin in this Latin verb. Likewise, students learn that although English isn't quite an inflectional language in the same way as Latin, it does, nonetheless, use inflectional endings. Some inflectional changes that occur in English are straightforward and even very young children can recognize them—e.g. A three-year-old knows that if the coffee cup belongs to daddy, it's "daddy's cup." The -s sound is associated with belonging to another. Others are less straightforward, such as the

verb “to go”. Simply putting the -ed sound at the end of “go” when speaking of the past gets you “goed”, which isn’t a word—a mistake young children often make.

The most complicated inflectional changes in English that the fourth-graders studied was the change in many nouns from singular to plural. Many irregularities occur, such as loaf becomes loaves, ox becomes oxen, and deer simply remains deer in the plural. However, the most exciting part of class has been the daily Latin saying. With every quote, I provide some context for its meaning and give examples in which the students can use them in everyday situations—hopefully to the astonishment of others. In the final weeks of the trimester we began reading Latin itself, and going forward our time together will be divided into two parts: grammar and reading. We will continue to work through *An Introduction to Languages* for the grammar component alongside *Lingua Latina*—a text entirely of simple Latin prose designed to teach students to read authentic Latin.

Subject: Art History
Teacher: Mrs. Rice

So far this year, we’ve studied the Palette of Narmer (c. 3000-2920 BC), the Step Pyramid complex of King Djoser (c. 2675-2625 BC), and Hunefer’s *Book of the Dead* (c. 1275 BC). These diverse works of art, spanning over 1,500 years, show a continuity of style remarkable in human history. This cultural continuity was deliberately pursued by the Egyptians as an expression of the cosmic order that made life possible.

The art and mythology of Ancient Egypt are fascinating in their own right, and these beautiful works became even more interesting when we turned the conversation from simple description to one about how the artists’ apparent priorities might reflect the culture in which they lived. We discussed the extent to which the dramatic topography of the Nile River valley insulated this civilization from hostile neighbors, and how the regular seasons of inundation, growth, and harvest contributed to ancient Egyptians’ faith that the natural order of things was predictable. This background

helped us to make more sense of ancient Egyptian ideas about death and the afterlife.

We concluded the unit with the



Hunefer’s *Book of the Dead*.

students applying what they had learned about the form and style of ancient Egyptian painting to create their own "papyrus" scrolls depicting members of ancient Egypt's pantheon of gods and goddesses.

Subject: Programming
Teacher: Mrs. Fesenko

In this trimester, we, as planned, were doing robotics. We started with the names of the pieces. This was very important since otherwise all the parts would have been called "little gray thing" or "this stick". Then we proceeded to the gears, learned about their application, and built transmissions that demonstrated how gears can be used to amplify or accelerate it. Also in this topic, we talked about the acceleration of spinning tops and the creation of gearboxes.

Next, we built our first robots, wrote code for them, and ran a sumo robot competition with boosted gears. One of the topics was touch and ultrasound sensors. Thanks to these sensors, our robots traveled around the room without crashing into any obstacles. The students also looked at the work of the light sensor with the example of a competitive game of kegelring. In this game, the robot starting in the center of the circle must find white pins and push them out of the circle, while the robot itself is not allowed to leave it. Both pin and edge-of-circle recognition algorithms used light sensors. The course was completed by building three different robot designs.

Fifth Grade

Subject: Math

Teacher: Ms. Ter-Saakov

Fifth-grade students came from the summer break enthusiastic and ready to work hard. We started the year by catching up on the area of triangles. Students then moved to the topic of 3D solids. Everyone especially enjoyed building shapes from the Polyhedron set.

Next students learned how to multiply and divide positive and negative integers. We followed patterns to discover why multiplying a negative number by a negative gives us a positive answer. We practiced quickly determining the resulting sign of longer products. Students now know to distinguish notations for exponents of negative numbers, such as -5^2 and $(-5)^2$.

Then students moved on to work on algebraic expressions and basic linear equations. Students learned such important vocabulary as “collecting like terms”. We had to be constantly aware of the order of operations. We practiced solving basic linear equations, as well as setting up such equations in order to solve word problems.

Subject: English

Teacher: Mr. Chilbert

At the beginning of *The Prince and the Pauper*, Mark Twain reminds us of this famous Shakespearean line: “The quality of mercy is not strained...” (*Merchant of Venice*, Act IV, Scene I). In order to contemplate this timeless truth, we dove headfirst into Twain’s wonderfully humorous tale. We traveled in and out of Tudor London alongside stately princes, honored kings, crass ruffians, and banished lords. Mercy, as it turns out plays in government as well as in friendship but the process of determining the quality of these roles requires much consideration. Mistakes



Fifth graders Fausto Ferreira, Alexander Bull, and Raphael Sommer reenact the scene Foo Foo the First from *The Prince and the Pauper*.

and poor choices are unavoidable, but how should we respond to these things when and where we have the power to control the perpetrator's sentence, be it subject, friend, or foe? Alongside serious discussions about human agency, betrayal, and honor, the Fifth Graders had many chances to belly laugh in class at some of Twain's delightful writing. From delusional hermits claiming to be archangels, to the King of England himself sharing a bed with a cow, there are some scenes that are just too good to forget. As a side project to our literary exploits, the students became very familiar with sixteenth-century English history and speech patterns.

I told the students at the beginning of the year that the primary point of our English class, and all of the things we do therein, is to help us get the most out of our books. I also shared that there are two primary skills to practice in order to achieve the primary point of English class: 1) talking about the book together and 2) writing about the book. The second of these requires many layers of hard work. Writing well requires a robust familiarity with grammar, a subject that we have spent lots of time with this year. We have covered the eight parts of speech in great depth and we have just started mastering the art of diagramming sentences. One does not learn to write well just by thinking about language, however, so we spend lots of time practicing with quick writes. These have taken many forms and utilize many styles of writing including persuasive, expository, and narrative paragraphs.

By December, we will be starting our next book, *The Legend of Sleepy Hollow*, and will also be getting ready for Poetry Night in January.

Subject: History

Teacher: Mr. Gormley

We began this year reading the saga that chronicled the fall of the western part of the Roman Empire. We used two varied accounts of Constantine I, to wit, Zosimus and Eusebius. These two chroniclers have very different purposes for writing and very different estimations of Constantine, which helps pose the problem of determining reliable sources for students. The former does his best to malign Constantine and the latter does what he can to elevate him and depict him as a saint. The difficulty is sorting out the probable from the improbable.

We continued from there to read of the movement of the Goths into Roman territory, their rioting, and the battle of Adrianople from the perspective of Ammianus Marcellinus, who was present for many of the conflicts about which he wrote. We then shifted to the Gothic historian Jordanes' account of the Goths and the Huns. Following that, we used Prokopios' account of the several sacks of Rome by the Visigoths and Vandals.

After we cover the reign of Justinian (and Theodora) in the east, we'll be moving on to learn of the Franks and the early Britons.

Subject: French
Teacher: M. Portier

After working on the relative and the tonic pronouns, the fifth graders worked on the difficult topic of matching past tenses. This class genuinely enjoys reading our novel, *Histoire d'une Revanche*. Through the context of the novel, we explored the political complexities of the period after the French empire, the Restoration period. We created a fictional trial and each student enjoyed impersonating individuals with different political points of view. Surprisingly, the political divide at the beginning of nineteenth century French politics translated into a gender division where the boys supported the monarchy and the girls the new republic. I am very impatient for the outcome of our next oral activity: the trial of the king.

Subject: Science
Teacher: Dr. Nagelberg

This trimester in fifth-grade science we explored a number of methods for describing the natural world.

To describe the positions of objects and organisms within space, we revisited René Descartes' Cartesian coordinate system. Equipped with masking tape and black



Alexander Bull and Finn Myers show off their fossil recreations.

Sharpie markers, the students set to work building a Cartesian coordinate system for the science classroom. This was difficult work, particularly when it came to labeling the z-axis. Students made a variety of proposals of methods for labeling all the way to the ceiling, but in the end, we decided to only label up to the top of the upper cabinets. This accomplished, students happily competed for the opportunity to take turns hiding Rhinoceri, sunfish, and toads while the other students sought out the runaway organisms and reported back their Cartesian coordinates, which sometimes included negative components.

To further explore how land surfaces are described in three-dimensional space, we studied topographic maps. We then made three-dimensional maps of the land surrounding MLCA using transparencies with each succeeding transparency corresponding to an increase in elevation

of ten feet. Students used colored Sharpies to draw the elevation on each

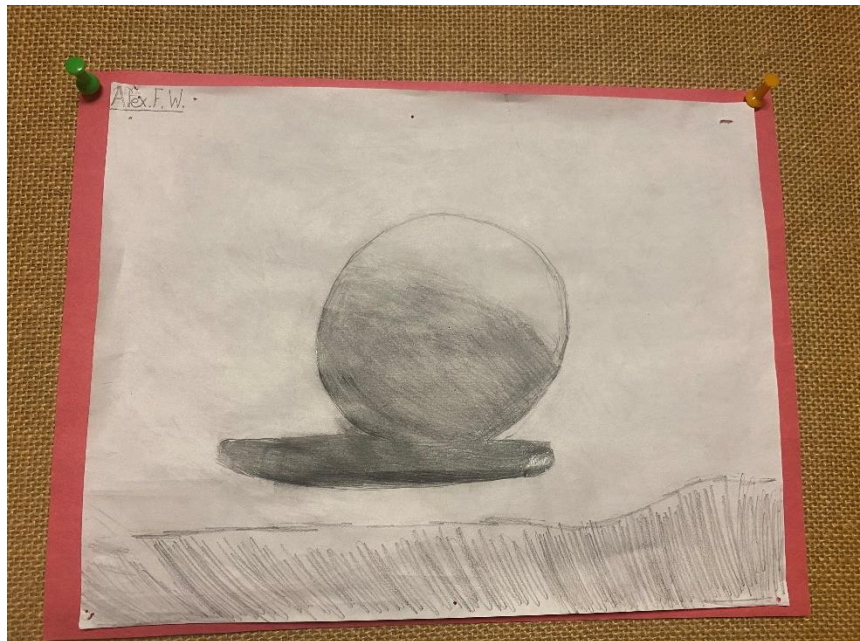
transparency. We then hole-punched and stacked the transparencies to create our own three-dimensional maps. We then put our maps to use as we tested a modern way of mapping elevation through barometric pressure.

Armed with these tools, we soon sought out ways to better explore and describe the objects and organisms we might encounter on our expeditions. We discussed and practiced the use of dichotomous keys to distinguish between and sort organisms. We also sought out features that we could use to distinguish between rocks, paying particular attention to specific gravity and Mohs' scale of hardness. As we studied specific gravity we learned how the relationship between mass and volume is known as density.

As we continued our exploration of rocks we read from *Science Comics: Rocks and Minerals* by Andy Hirsch. We learned how elements are forged within stars and learned how protons, neutrons, and electrons determine some of the properties of an atom and the minerals of which they are composed. We observed the crystal structures of salts and began an exploration of how minerals can be altered through chemical reactions. We then shifted our focus to the formation of rocks from minerals and, in particular, on how different types of fossils are formed. In doing this, we examined several real fossils. We finished the trimester by creating cast fossil replicas from molds based on real fossils.

Subject: Art
Teacher: Mr. Murdoch

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Pencil drawing of a sphere by Alexander Weinstein.

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In a new exercise this year, students were asked to work in groups and repeat the steps of the drawing process as they understood it. They did well and are on their way to becoming conversant in the language of drawing and painting. Also new this year was a pen and ink exercise where students drew first in pencil. Next, they did an ink drawing over the pencil drawing and erased any remaining pencil lines so it looks like a clean, professional ink drawing. Lastly, each month one student is designated a class helper and gets to pick one of the references that the class will draw in the coming lessons.

Subject: Latin

Teacher: Mr. Cialini

Latin is not dead. We speak it in the fifth grade. No, we cannot say much, but we try nonetheless. We started questions and answers in very basic Latin. To the question, "Quis ego sum?": Who am I? students can answer any variety of the following: "Es vir et magister et filius et frater et pater.": You are a man and a son and a brother and a father. From this foundation, they can begin to play with word order, singular and plural, subject-verb agreement, adjective agreement, and the addition of subject pronouns. Adjectives are especially fun since they allow students to actually express themselves. Having a spoken component, alongside reading and writing, and grammar, keeps the language fresh in students' memories; but more importantly, it keeps them interested. Therefore, we have spent five to ten minutes every day reading or speaking—writing will come later. In the first trimester, our goal was to memorize the first and second declensions and the present tense verb endings for the first conjugation.

All of these, though basic, can be deceptively easy. One is tempted to believe that he has them all memorized, but they can easily be forgotten without intense repetition from many fronts. For example, in order to demonstrate that they know the endings they must be able to do the following quickly and accurately: decline a noun, recite the endings themselves, and build individual case forms from Latin to English and vice versa. Just one of those skills isn't enough to master a declension.

It is often stated that in Latin word order is inconsequential, as if classical authors merely arbitrarily toss words here or there without intention or artistry. Latin word order, although more flexible than in English, is very important. Students first encounter its importance with the genitive case, which has a number of uses but is most commonly used to show possession. A slapdash word order can obscure the real

meaning of a sentence. Take this for example: *Servus agricolae equum laudat*. *Agricolae* is the genitive noun. Does this say, The slave praises the farmer's horse; or, The farmer's slave praises the horse? Since the genitive noun is in the middle of the other two we have no way of knowing. Ergo, the genitive ought to be closer to the noun it is modifying. Examples such as this show students that a flexible word order doesn't mean a chaotic one, and that they have some agency for crafting their own Latin sentences.

Subject: Art History

Teacher: Mrs. Rice

Fifth-grade art history has focused this trimester on Emperor Constantine. Constantine carried out a revolutionary agenda; before moving the capital to Constantinople ("Wait! How can he move the capital of Rome away from Rome?!"). Constantine overthrew his co-Emperor, Maxentius, and ended the persecution of Christians in the Roman Empire. However, he recognized the value of adhering to tradition where it would support his claim to power.

To illustrate this dichotomy, we studied two works in considerable detail: the Colossus of Constantine and the Arch of Constantine, both erected in Rome shortly after the Emperor's ascension to power. The students learned to identify which elements of these works continue in the classical tradition (idealized figures in naturalistic poses,



The Arch of Constantine.

carved in high relief) and those that mark a dramatic break with the past (simplified, *hieratic* style). Apart from this new artistic style, we talked about how other aspects of each monument (placement in the city, the incorporation of textual elements) were crafted to legitimize Constantine's rule in the hearts and minds of the Romans. With guidance from Mr. Chilbert, the students put to work their developing essay skills to describe the ways in which each work expressed the juxtaposition of traditional and novel elements.

Subject: Programming

Teacher: Mrs. Fesenko

In this trimester, we, as planned, were doing robotics. We started with the names of the pieces. This was very important since otherwise all the parts would have been

called "little gray thing" or "this stick". Then we proceeded to the gears, learned about their application, and built transmissions that demonstrated how gears can be used to amplify or accelerate it. We also talked about the acceleration of spinning tops and the creation of gearboxes in this topic.

Next, we built our first robots, wrote code for them, and ran a sumo robot competition with boosted gears. One of the topics was touch and ultrasound sensors. Thanks to these sensors, our robots traveled around the room without crashing into any obstacles. The students also looked at the work of the light sensor with the example of a competitive game of kegelring. In this game, the robot starting in the center of the circle must find white pins and push them out of the circle, while the robot itself is not allowed to leave it. Both pin and edge-of-circle recognition algorithms used light sensors. At the end of the trimester, we studied the design of the robot moving along a line with one light sensor.

During the trimester, several small competitions were held, including robot sumo, robot races with accelerated transmissions, robot football with remote control and infrared sensors, and kegelring.

Sixth Grade

Subject: Math

Teacher: Ms. Ter-Saakov

Sixth grade continues to work their way through level 5 books. The material corresponds to what is usually called pre-algebra. Corresponding common core standards covered are considered sixth, seventh, and occasionally eighth grade. Mastering these topics requires a thorough study of the guidebook, the practice book, and additional practice of corresponding sections on Beast Academy online.



Fractions are older than you might think! This is how the Ancient Egyptians denoted fractions four thousand years ago.

The chapter we started the year with was ratios and rates. One of the most important skills students practiced was using conversion ratios. Students will be expected to be able to perform unit conversions in science regularly throughout the school years.

Next students explored decimals, converting fractions to decimals and back, as well as performing operations on decimals. Students were introduced to repeating decimals.

Currently, sixth grade is working on the last book in the Beast Academy series.

Students are mastering the concept of percents.

Subject: English Language and Literature

Teacher: Dr. Sigelman

This trimester in sixth and seventh-grade English, we focused on grammar, literature, and writing. Students have also received regular vocabulary-building and poetry memorization assignments.

For grammar, we have been working our way through a thorough review of parts of speech with special attention to the six English tenses and the progressive aspect. After reviewing the difference between a clause and a phrase, we studied prepositions and prepositional phrases.

The first literary text we read this fall was Shakespeare's *Romeo and Juliet*. Among other things, we focused on the organization of time within the play (did you know that time flows differently for different characters in Shakespeare's play?); on detecting and interpreting the multiple instances of wordplay (we observed that the

protagonists engage in wordplay even in some of the most somber scenes); on characterization (what makes Juliet heroic? How is her character different from Romeo's?); and on the Renaissance concepts of honor and proper social etiquette for men and women. As a special Halloween-themed activity we also read Edgar Allan Poe's famous short story, "The Murders in the Rue Morgue" (known as the trailblazer of the mystery genre). At the beginning of November, we finished reading *Romeo and Juliet* and have begun our next work: Charles Dickens' *A Tale of Two Cities*.

Throughout, I have prioritized a deep, comprehensive reading of all the texts we encountered. I have therefore minimized reading in homework assignments; instead, we read almost the entirety of *Romeo and Juliet* and all of "The Murders in the Rue Morgue" in class together, alternating between students and teacher reading out loud and listening to Audible recordings of our texts. We listened together to the first three chapters of *A Tale of Two Cities*. Because the novel genre is inherently lengthier than the dramatic one, students will be expected to read chapters of Dickens' novel at home on their own, but we should still be able to continue to read extensive passages in class together.



The "Murders in the Rue Morgue", illustrated by Arthur Rackham, in *Poe's Tales of Mystery and Imagination* (1935).

Every week, students submit and receive feedback on a writing assignment. We began the year with informal assignments ("journal entries"). I then introduced more formal assignments (short, 190-word essays). Recently, we progressed to the formal 5-paragraph expository essay (250 words minimum). I have drawn essay topics from the literature we have been studying, e.g., discuss in what way time flows differently for Juliet's nurse as compared to the two young lovers; why do you think Shakespeare creates this contrast?; discuss what Eldorado symbolizes in Poe's poem; discuss the characters of Romeo's chief three friends and how they affect Romeo. Some of the skills we have been focusing on in writing are the articulation of a debatable claim; the use of topic sentences; proper selection and use of quotes; and development of supporting examples. I have also gradually been removing the "scaffolding" which I provided students at the beginning of the trimester. In the beginning, I would often dictate to the class the entire introductory paragraph; during the winter trimester, we will be progressing to students learning how to articulate their own debatable claims.

To work on vocabulary building, students are responsible for committing to memory a list of 15-20 Latin and Greek stems they can expect to see frequently in English (e.g., anthro; pseudo; demo; and so forth) every week.

Lastly, for poetic recitations, students memorized several passages from *Romeo and Juliet* as well as Edgar Allan Poe's poem "Eldorado." As we move away from

Shakespeare's poetic text and into Dickens' prose during the winter trimester, I will be assigning more free-standing poems for students to memorize and recite.

Subject: History

Teacher: Mr. Gormley

This year we began with a review of the Wars of the Roses in order to have some background and context for the Tudor dynasty in England. We proceeded almost immediately to cover the reign of Henry VIII, his many wives, and the break with Roman Catholicism. Along the way, we also learned of Luther's break from the Church. Henry split from the church although he was not an enthusiast of Luther, despite the fact that it would have been politically convenient if he was. Using David Hume's *History of England*, we continued on through Edward VI's brief reign, Lady Jane Gray's disputed rule of nine days, and his sister Mary's effort to return the nation to Catholicism. Of course, along the way, we learned of various occurrences among the French and the Scots. We just completed the rule of Elizabeth, during which time so many major events occurred, including the fate of Mary Queen of Scots and Philip II's "Invincible Armada."

During our discussions of Elizabeth, a question emerged regarding what constitutes a good leader. Are there times when one must sacrifice the moral/ethical good for a chance at a political good if one must choose? Is choosing the political good over the



Elizabeth I, oil on panel by George Gower (1588).

moral actually a loss, even if one "wins" politically? Are the moral and political goods necessarily opposed? Elizabeth certainly seemed to have been willing at times to sacrifice the moral good for a political win. Was her choice correct?

Subject: French

Teacher: M. Portier

The sixth grade started the year by reviewing the simple future as well as they how to make hypotheses while using this tense. I introduced them to the pluperfect, a new past tense, and they have been working on matching past tenses through various writing exercises. The reading of *Vingt Mille Lieues sous les Mers* has offered us the lexical world of the deep sea, its creatures, and its mysterious environment. This class particularly enjoys the mysterious personality of Captain Nemo and the descriptions of the submarine, the Nautilus. They have had many conversations about

how the aquatic wilderness is described in this famous novel of the nineteenth century and the way in which Verne creates a relationship between humans and nature. Lastly, we have also completed the analysis of the poem, *Albatros* by Charles Baudelaire, continuing our maritime theme

Subject: Science

Teacher: Dr. Nagelberg

This trimester in sixth-grade physics we focused on using measurements to describe physical phenomena. We began with an exploration of parallax-the difference in the apparent position of an object when it is viewed from two different positions. To demonstrate parallax for yourself, place your thumb an inch in front of your nose and close your left eye. Now open your left eye and instead close your right eye, keeping your thumb in exactly the same position. Even though your thumb has not moved, it should appear to do so. This phenomenon is known as parallax.

The astronomer Tycho Brahe (1546-1601), known especially for his meticulous and accurate celestial observations, used the phenomenon of parallax to argue that the apparent "stella nova" or "new star" he observed in 1572 (SN1572) was in fact a star and not a comet between the earth and the moon, as was argued by others. If SN1572 was nearby, it should appear to have different stars "behind" it when observed from the earth at different times of the year. Since this did not occur, it appeared to belong to a celestial position beyond earth's atmosphere and should be classified as a star.



Sixth graders (from left to right) Ariel Yu, Alana Hedge, Nicole Federov, Ben Shpilman, Catherine Zafiriou, and Pietra Tarr work on their light diffractions.

To better understand Brahe's observations, we sought to quantify parallax. Using a marshmallow with a toothpick sticking out of it to represent a star and two-meter sticks (one to measure the distance from the observer and the other to mark background

positions), we demonstrated that parallax becomes smaller the further the marshmallow star is placed from the observer. This could be quantified by noting both the meterstick position of the marshmallow star and then finding the difference between the two apparent positions of the marshmallow star (one with the left eye closed and one with the right eye closed) using the meterstick placed perpendicularly to the observer at a distance of 60 cm.

To practice using parallax to measure distances using angle measurements, we went outside and measured out a 10-meter baseline from position A to position B. We then recorded the angles between the line and a balloon tied to a tree, first from position A and then from position B. Next, we made scale drawings of our findings on graph paper and used the observed angles to complete a triangle using the line from position A to position B as the base of our triangle. We then used the graph paper to determine the distance y between our baseline and the balloon.

When taking measurements of celestial objects, we deal with distances of much greater magnitudes than those we measured between our baseline and the balloon. To handle such magnitudes, we reviewed scientific notation. We also talked about how parallax is used in depth perception, and looked at stereoscopic images of celestial objects. We also moved into an initial exploration of light. What are its properties? How is it that we can use it to measure and observe objects and phenomena not only beyond our solar system, but beyond our galaxy?

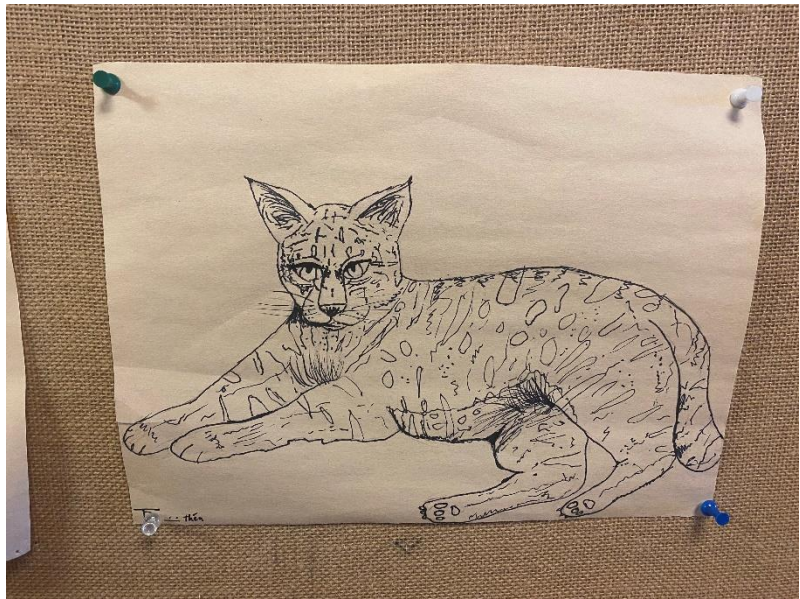
We briefly discussed Isaac Newton's work in studying color and light and began our own explorations using diffraction grating. James Gregory, familiar with Newton's work, wrote in 1673 about his own finding of the diffraction of white light when passing between the barbs of a feather. He wrote, "let in the sun's light by a small hole to a darkened house, and at the hole place a feather ... and it shall direct to a white wall or paper opposite to it a number of small circles and ovals ... whereof one is somewhat white ... and all the rest severally coloured." Using man-made diffraction grating rather than feathers and artificial lights rather than the sun (if you do this experiment on your own, make sure not to look directly at the sun), we also observed the splitting of apparently white light into component wavelengths. Intriguingly, we observed that the pattern of the colors was different for different light sources. We further explored the reflection and diffraction of light using curved mirrors and lenses and by drawing and measuring resultant images and angles of refraction.

Finally, we began a study of motion. We had first discussed light as a means of observing distant objects, and we returned to further examine this property of light. How much faster is light than our own movements? We moved then into an exploration of speed and velocity. We revisited graphical representation of movement and velocity and used image analysis software to track the movements of migrating cells in zebrafish embryos in movies taken under different genetic conditions. As we move into the second trimester we will expand our study of motion to acceleration and forces.

Subject: Art
Teacher: Mr. Murdoch

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So far we have explored the art and practice of drawing. We have explored shape, proportion, underlying pattern, value, parts of shadow, silhouette and positive and negative shapes, and some basic perspective drawings. We have also been exploring how to work in layers and when to apply techniques in the picture-making process. Students have drawn a variety of subjects from photo references, class set-ups, or old master references including still-life, animals, seashells, and landscapes.



Pen and ink drawing of a black-footed cat by Thea Brisson.

Materials students have used include pencil and pen and ink. In addition, I try to show examples as appropriate from old masterworks that follow in the Western European tradition of picture-making.

I am pleased to report that the concepts are beginning to become ingrained in the class. The students have done some very developed drawings and displayed the ability to achieve further success as we continue in the remaining trimesters.

In a new exercise this year, students were asked to work in groups and repeat the steps of the drawing process as they understood it. They did well and are on their way to becoming conversant in the language of drawing and painting. Also new this year was a pen and ink exercise where students drew first in pencil. Next, they did an ink drawing over the pencil drawing and erased any remaining pencil lines so it looks like a clean, professional ink drawing. Lastly, each month one student is designated a class helper and gets to pick one of the references that the class will draw in the coming lessons.

Subject: Latin

Teacher: Mr. Cialini

Latin is not for the weak. Each sixth grader confronted this harsh truth as they began tackling the third declension. The transition from the first two declensions to the third is much like that from arithmetic to algebra: One believes he has mastered numbers through adding, subtracting, multiplying, and dividing without even considering the possibility that letters could be involved in math. (At least that is how I felt when learning algebra.)

The third declension—a declension being a family of nouns that use the same set of inflectional endings—breaks the familiar pattern of the first and second and seems unnecessarily cumbersome. Moreover, more than half of the nouns in the third declension have stem changes, i.e. their form (spelling) can change somewhat dramatically when declined. Miles (soldier) becomes milites in the nominative plural. Worse yet, it is militibus in the dative and ablative plural. Additionally, masculine and feminine nouns share the same endings, so one must memorize the gender of each noun. The pain intensifies. Finally, the children weep like the Greek Algea after hearing that most Latin nouns belong to this declension. At this point, small rumors of rebellion start brewing, and students wield their pencils like daggers. (Incidentally, St. Cassian of Imola, a fourth century Roman tutor, was stabbed to death by his students after he was handed over to them by the authorities for not sacrificing to the Roman gods during the reign of Julian the Apostate. Apparently, Cassian was a harsh grader.)

Luckily nothing that severe happened in our class. The class also learned third declension adjectives which, like nouns, are not declined painlessly. These adjectives are divided into three terminations, meaning that some adjectives share the same endings in masculine, feminine, and neuter in the nominative singular, some share the same endings for the masculine and feminine only, and others have different endings in all three genders. Finally, we learned the second conjugation, which shares the same endings with the first, but has a different stem vowel. September and October were grammar heavy. In November, we began practicing reading and listening to Latin. I'm very proud of the sixth grade for all their hard work this trimester.

Subject: Art History
Teacher: Mrs. Harper

We began the year looking at Giotto's frescoes of Christ's life in the Scrovegni Chapel and how different these figures who live in a three-dimensional space are from the flat depictions of Medieval narratives. Giotto's interest in depth is reflective of the Naturalism that was gaining popularity during the early Renaissance. Instead of figures inhabiting abstract heavenly spaces, they were now depicted in earth-like environments, with elements like shade, drapery, and trompe l'oeil. These all work to make the scenes look more life-like. "They look like real people with feelings, and less like very serious cartoon people!" as one student summarized. Scrovegni himself made an interesting story for the students, as he is reported to have commissioned the chapel in order to atone for the sin of usury. Particularly alarming for Scrovegni was that his usurious father was given a special place in Hell in Dante's *Divine Comedy*! He sought to put himself and his family in a better light by giving money for this beautiful chapel.

The students are continuing to learn how to decode Christian iconography and are able to identify key scenes and characters in Giotto's narrative. For instance, in Giotto's "The Kiss of Judas," students are able to identify Peter by the knife he holds in his hand and Judas by the fact that he is kissing Jesus in greeting. They are also learning to decode compositional techniques. For instance, in the same image by Giotto, the students are able to identify Jesus by the way in which the surrounding spears and drapery create lines and angles that all lead to Jesus, drawing the viewer's eye to Him. This functions as a way for the viewer to know that He is the protagonist.

Continuing in our study of the early Renaissance, we next turned to Brunelleschi. The students learned how Florence was eager to top its arch-rival, Milan, and started to build in the late thirteenth century what it hoped would be the most impressive cathedral ever made—complete with a giant closed dome! Unfortunately, no one knew how to build a giant closed dome and it wasn't until the engineer/artist/architect/goldsmith/genius Filippo Brunelleschi arrived on the scene in the early 1400s that the cathedral was completed. With new safety standards (workers drank watered-down wine instead of regular wine while working and there was a safety net around the construction areas), and many new construction inventions, Brunelleschi completed the dome in 1436. Not only was he



Giotto's "The Kiss of Judas" by Catherine Zafiriou

credited with drawing the first architectural blueprints, but he also is thought to be the inventor of linear perspective.

Students have copied Giotto's works and Brunelleschi's dome as a way to learn to be observant. Every time they sit down to copy they notice more details.

Subject: Programming
Teacher: Ms Fesenko

Students in this trimester were studying the JavaScript programming language. Primarily, we used the "code.org" platform, which provides an interactive tutorial for 11 lessons. We completed projects on the following topics: Buttons and Events, Multi-screen Apps, Variables, If-Statements, User Input, Strings, Boolean Expressions, "If" Statements, "if-else-if" and Conditional Loops.

For the final projects, we developed mini-games like "Clicker Game" or "Color Sleuth.

Co-Curriculars

Subject: Gym

Teacher: Mr. Soto

Lower School gym classes meet twice a week. This fall, the students have been building on their fine and gross motor skills such as balance, eye-hand/foot coordination, core strength, leg and arm strength, cooperation, and teamwork all while playing fun games.

Games and activities include large parachute games, scooter tag games, spaghetti and meatballs tag, snakes in the grass, walk the plank balance challenge, sideline soccer and crazy ball soccer, and cookie jar ball throwing game. Tagging games including capture the flag, capture the ball, final destination, and executioner tag.



Fifth grade gym plays a scooter game indoors on a rainy day.

Along with building on these skills the class is also learning and putting to practice character-building words. Here is a list of the words the students will learn throughout the year.

CHARACTER WORDS

RESPECT - We treat others the right way.

SPORTSMANSHIP - We follow the rules of the game and respect others.

CONFIDENCE - We believe in ourselves because we are AWESOME!

HONESTY - We always tell the truth.

ENCOURAGEMENT - We cheer for our friends.

SHARING - We provide something we have to a friend who needs it.

TEAMWORK - We help each other by working together.

PATIENCE - We wait quietly for our turn.

APPRECIATION - We should thank someone for being a good friend, parent or classmate.

POSITIVITY - We are happy to play games!

RESPONSIBILITY - We do our jobs.

DETERMINATION - We never give up!

LEADERSHIP - We set good examples by helping and listening to others.

INTEGRITY - We do the right thing, even when no one is watching.

COURAGE - We are brave!

COMMITMENT - We do our best and stick with it.

Subject: Mixed Recess

Teachers: Various

Recess at MLCA is a mix between a scene at an Ancient Roman Forum and Anne of Green Gables. With the help of their recess monitors, the students get the chance to debate, defend, and promote the laws that govern their free play. And while their history lessons are alive and well during their freetime, so are the science and poetry lessons. Students can be seen, leaf-covered, on all fours, tracking the dramatic movements of ant colonies. It should also be mentioned that the discovery trail has hosted a few impromptu reenactments of scenes from Shakespeare, Twain, and Virgil. In short, recess is for fun, and the students enjoy it immensely.



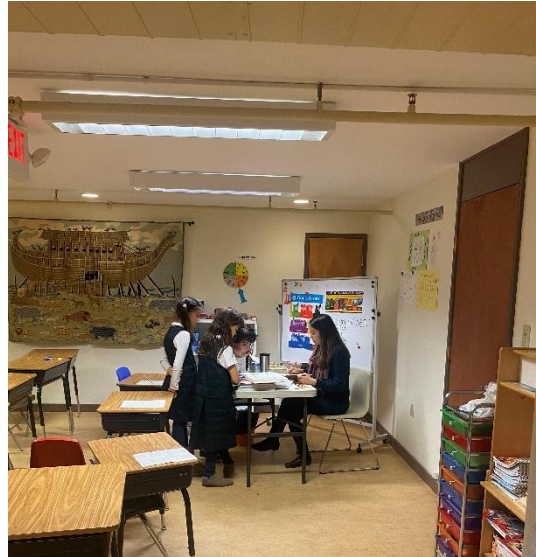
MLCA students turn the parking lot into a chalk art gallery!

Subject: Kindergarten-Second Grade Christian Studies
Teacher: Ms. Emily Woo

The K/1/2 Christian Studies class has begun our survey of the Bible. The students have had so much fun learning about the God of the Bible and his plan for the world, starting with creation. This first trimester we have focused on the books of Genesis and Exodus. We have learned about important biblical figures such as Adam and Eve, Noah, Abraham and Sarah, Isaac and Rebekah, Jacob/Israel, Joseph, and Moses. To supplement the Bible lessons, the students have been making various crafts and playing review games. We conclude every class with prayer. I am praying that the students will retain the foundational truths about God they have learned in the first trimester.

Subject: Fourth Grade Christian Studies
Teacher: Ms. Emily Woo

The fourth grade Christian Studies class has begun our survey of the Bible. The students have had so much fun learning about the God of the Bible and his plan for the world, starting with creation. This first trimester we have focused on the books of Genesis and Exodus. We have learned about important figures such as Adam and Eve, Noah, Abraham and Sarah, Isaac and Rebekah, Jacob/Israel, Joseph, and Moses. We have covered important events such as the creation of man, man's fall into sin, the flood, God's promise to Abraham, and the exodus from Egypt. To supplement the Bible lessons, the students have also been memorizing verses from the Bible, memorizing the names of the books of the Old Testament, playing review games, and participating in discussions and activities. We conclude every class with prayer. I am praying that the students will retain the foundational truths about God they have learned in the first trimester.



Fourth grade students June Winfield, Claire Farwell, and Francesco Grigoli listen as Ms. Woo reads from the Bible.

Subject: Fifth-Seventh Grade Christian Studies
Teacher: Ms. Erika Woo

This semester in Christian Studies class, we learned how to read Bible passages in context. Placing the Bible stories into the larger context of world history, we connected the dots in one big timeline. We also discussed how to read the Bible with the context of who wrote the book and what the society and culture were like when they were writing. We then read through many of Jesus' parables and used inductive Bible study

methods to answer two key questions: What is the Kingdom of Heaven? and What does this parable tell us about who God is? Each parable showed us another glimpse of both the Kingdom of Heaven and God's attributes. We ended the semester by rewriting a parable as it might look in a modern context; for example, what would the parable of the prodigal son look like if the family lived today? Each student took a creative approach to rewriting their chosen parable to demonstrate an understanding of how the small story points towards larger truths.

Subject: Kindergarten and First Grade Hebrew Teacher: Morah Dina

In our kindergarten (Gan) and first grade (Aleph) Hebrew class we have been studying/reviewing the Hebrew alphabet. Combined with the letters, the students learned Hebrew vocabulary. The book we are using, Ariot, allows us to practice writing and to engage in some fun activities.

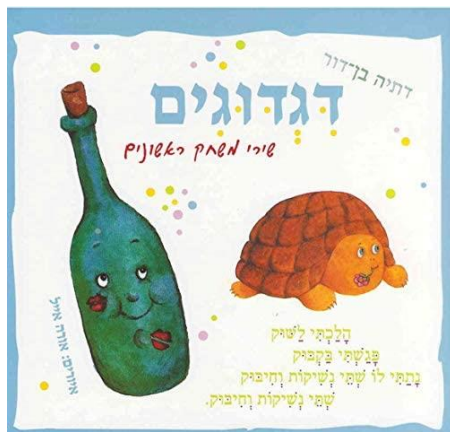
Every morning in class we talk about the day of the week, the weather, and the characteristics of the season. We sing our welcome song and the song of the days of the week. All is done in Hebrew.

In preparation for our Winter Celebration, the students learned a poem written by a well-known Israeli poet: Chayim Nachman Bialik. The children learned the key vocabulary in the poem and memorized it.

Our goal for the year is to be able to recognize the letters and the sound they make, to read fluently, and to build their vocabulary skills.

Subject: Second Grade Hebrew Teacher: Morah Dina

Our second graders have been reading a lot to improve their fluency. They practice script writing while working on text comprehension. Our book, *Yesodot Halashon #1: The Foundations of the language*, is used in class to learn Hebrew grammar and sentence construction.



A popular book of poetry by
Datya Ben Dor

The book is engaging and fun to work with.

We begin every session by describing our day, the weather, and the season. Students are building their vocabulary skills by being encouraged to speak Hebrew in class.

In preparation for our Winter Celebration, the students learned a poem written by a well-known Israeli poet, who writes mainly for children: Datya Ben Dor. The students learned the key vocabulary in the poem and memorized it.

Our goal for the year consists of improving our fluency in reading and building confidence in speaking Hebrew.

Subject: Third and Fourth Grade Hebrew
Teacher: Morah Dina

Third and fourth graders have been reading a lot to improve their fluency. They practice script writing while working on text comprehension. Our book, *Yesodot Halashon #2 -The Foundations of the language*, is used in class to learn Hebrew grammar and sentence construction. The book is engaging and fun to work with.

We begin every session by describing our day, the weather, and the season. Students are building their vocabulary skills by being encouraged to speak Hebrew in class.

In preparation for our Winter Celebration, the students learned a poem written by a well-known Israeli poet and composer: Uzi Hitman. The students learned the key vocabulary in the poem and memorized it. In addition, they composed another section for the poem, that went along with the poem's theme and had the required rhyming vocabulary.

Our goal for the year consists of improving our fluency in reading and building confidence in speaking Hebrew.

Subject: Fifth Grade Hebrew
Teacher: Morah Dina

Fifth-grade students have been following an innovative curriculum originating in Israel: B'sod haivrit. In class, students are reading texts describing everyday life in Israel. They are engaged in conversations and listen to dialogues to test their comprehension level. Students are encouraged to speak Hebrew in class to build confidence in speaking and using the vocabulary they know.

In preparation for our Winter Celebration, the students learned a poem written by a well-known Israeli poet: Hannah Senesh. The students learned the key vocabulary in the poem and memorized it.



Israeli poet Hannah Senesh.

In the coming weeks, students will start working on writing short paragraphs on different topics. They will be able to use their vocabulary skills and construct sentences.

Subject: Sixth-Eighth Grade Hebrew
Teacher: Morah Dina

Sixth to eighth-grade students have been following an innovative curriculum originating in Israel: Bishvil Haivrit. We are currently in book #1, however, we are progressing rapidly. In class, students are reading texts describing everyday life in Israel. They are engaged in conversations and listen to dialogues to test their comprehension level. Conversations and discussions in class are conducted mainly in Hebrew while vocabulary skills are built and observed.

In preparation for our Winter Celebration, the students learned two poems written by a well-known Israeli poet: Rachel. The students read about the poet's life and wrote a short essay about her in Hebrew. They learned the key vocabulary in the poems and memorized them.

Subject: Kindergarten-Sixth Grade Judaic Studies
Teacher: Rabbi Sinensky

Our Judaic Studies students begin each morning with prayer, during which we have been adding one section to the Amidah prayer each day. We have now completed all 19 blessings of the Amidah.

Following prayer, we have had three foci over the course of the first trimester. During the first half of the trimester, we prepared in depth for the Jewish holidays. This includes a close study of the laws and customs of the holidays, as well as hands-on experiences such as shofar blowing, learning the prayers of the High Holidays, building our Sukkah, and taking the four species on Sukkot. Following the holidays we studied each of the 19 blessings in depth.

Each Friday we study the narrative weekly Torah portion comprehensively, with an eye toward reviewing all 5 books of the Torah by year's end. In addition to learning the stories and content of each chapter, students take notes on the contents of every chapter of the Torah.

Most recently, we have begun close textual Chumash study, using the narratives of Abraham in Parshat Lech Lecha as our core text. Every student received a copy of the Chumash—an extremely exciting and auspicious occasion which we celebrated with gusto! Bible study is segmented into four components: vocabulary, grammar, text reading and comprehension, and memorization of key phrases using the cantillation. There is much to do, and students are excited to develop their knowledge and skills in all four domains in the coming months.



First grader Deniz Gotkas smiles in his piano lesson.

Subject: Piano Lessons

Teachers: Mrs. Butterworth and Mrs. Voznaya

It brings a special lightness to the soul to hear our Lower School students playing Brahms and Debussy in the hallways at MLCA. Mastering piano requires intense dedication and discipline. This may be part of the reason that the percentage of Americans who play the piano has steadily decreased over the past 60 years. Tragically, the vast majority of children today do not get to taste the fruit of learning this beautiful instrument.

At MLCA, our students live out their daily lives in a place where piano practice is normative. It is exactly this kind of familiar exposure to beauty that puts the required dedication and discipline into perspective. Ms. Marina and Ms. Karina are caring guides who help students gracefully find their way in a subject that brings together theoretical knowledge and physical dexterity. In the end, the students develop a delightful familiarity with something which was once incomprehensible to them. They begin every year by focusing their attention on technical tasks. In particular, the students are encouraged to become more attentive to sound for a more professional performance. This year MLCA has introduced music theory into our piano lessons, making them more comprehensive.

Clubs

Club: Nature and Science, First-Third Grade

Teacher: Mr. Darer

In nature and science club, the students have been busy exploring the natural areas around the school and working in the garden. They planted a fig tree and a paw paw tree and collected an assortment of rocks from the large hole they dug that the fifth-



Nature and Science club members (from right to left) David Gartenberg, Henry Winfield, Ben Weber, and Daniel Canter write with pokeweed berry ink.

birthday card for a teacher using the dye!

Club: Nature and Science, Fourth-Sixth Grade

Teacher: Mr. Darer

In nature and science club, the students have been working on a woodworking project to build a bow drill from wood harvested from around MLCA. The bow drill can start a fire through friction. As the wooden spindle twists back and forth against the wooden base board, it heats up, smokes, then forms an ember due to friction. The ember can be coaxed into a fire with the right natural materials. Because the different parts of a bow drill have to be made up of different types of hardness of wood, the students first learned the difference between hardwood and softwood trees (softwood trees are coniferous) and then learned the relative hardness of hardwoods (oak and maple are harder, tulip and sassafras are softer).

grade science class is helping to identify. Next, they learned about natural pigments and that the plant pokeweed produces berries in the fall that can be harvested and processed to produce a light purple color.

After learning how to identify pokeweed, they went out into the woods at school to find the plant and harvest the berries. They made a dye by using rubbing alcohol to extract the pigments from the berries. Afterwards, the students used the dye to draw and write on pieces of paper. One student even made a

We learned how to identify these species both by leaves, bark, and branching pattern (maples have opposite branching). We then harvested the softer tulip tree wood for the spindle of the bow drill and baseboard, and plan to harvest the harder oak or maple for the hand holder. The students had to carve their spindle into a point at both ends and carved their bow as well. They learned about knife safety and wood carving techniques during this project. We are just about finishing up building the bow drill kit.

Club: Poetry

Teacher: Mrs. Martindale

Poetry Club spent this trimester thinking about the different ways poetic lines can be formed. They have written haikus (syllable counting), ballads (stress counting), and poems in iambic meter (stress and Sullu counting). We also had fun reading and writing shape poems.

Club: Math

Teachers: Dr. Fradkin and Mrs. Ter-Saakov

Most Lower School math club sessions are devoted to practicing problem solving techniques, especially those that involve combining different topics. While many of these topics are familiar to students from math class, the problems require a different level of reading comprehension, perseverance, and ability to tackle multi-step solutions. The problems can often be grouped by the approaches to solving them and math club is a great place to become familiar with these approaches.

The three major topics that we focused on this trimester were logic, number theory, and coordinate geometry. The topics were presented through age-appropriate activities and problems.

In addition to solving problems, time was spent on playing a variety of mathematical games. These are always a big hit with the students.



Yoni Gartenberg and Zoe Fradkin work on a math activity.

School Events

Columbus Day Assembly

It has become an annual tradition at MLCA for our First Day of School Assembly to be rained out. This year, that meant that we waited to meet as a full school until our second assembly, the Friday before Columbus Day to celebrate a whole multitude of things. First, we welcome everyone back and split into the four Olympic *poleis* (city-states). We then, as is our custom, invited the oracle to induct the new students into their respective *poleis*. This was done with the backdrop of raucous applause from members of each students' new *polis*. After this, we announced which polis had won the summer reading competition (congratulations to Athens!). We finished things off with poetry recitations, an address about Christopher Columbus by Dr. Sigelman, and a big thank you to all our teachers for their work so far this year.



Students listen to Dr. Sigelman's address

Halloween Parade

The Halloween Parade was a big hit with the Lower School students. Thanks to the work of the HSA parents, we had a corridor of spooky decorations for the students to enjoy throughout the day. We saw Einstein, Artemis, Julius Caesar, and many others. The cherry on top was that an Upper School student, Ari Shpilman marched at the front of the parade with his accordion playing live music to get us all in the spirit!

Math Festival

We learned at the 2022 Math Festival just how many math-loving kids we could fit in our building. Our final number was just over 140! Every room was bursting with mathematical joy.. With a focus on "hands-on" activities, the Math Festival helps its

visitors appreciate just how many things relate to the wide field of math: symmetrical snowflakes, wooden bridges, and Platonic solids served as a few of many subjects that visitors could enjoy. It is difficult to leave an event such as this without feeling proud to be at a school that believes deeply in the power and beauty of mathematics.

Musical Morning, November 22nd

On the morning before Thanksgiving Break, we celebrated the hard work of our youngest piano students. The K-2 students each performed the pieces they have been work on with their piano teachers. We also got to hear a violin piece from the Kindergarteners as well as a choral song put on by all the K-2. The students enjoyed refreshments with all of their distinguished guests who came to see them.



Mr. Anthony leads the kindergarteners, first graders, and second graders in singing "Do Re Mi" at Musical Morning

Faculty Spotlight

In addition to our amazing and accomplished students, we have remarkable staff leading the way in their respective fields. Please help MLCA congratulate these staff accomplishments!

Dina Eliezer (Hebrew): Morah Dina is peer-reviewed and published! She was recently notified that her article, "The Rabbinic Library of the Izmir: A New Encounter and Initial Attempt of Preservation" and it was accepted into the collective volume of *The Jewish Pearl of the Aegean: Izmir (Language, Literature, History, Art, and Culture)*. The book will be published in early 2023. Congratulations on this wonderful accomplishment, Morah Dina.



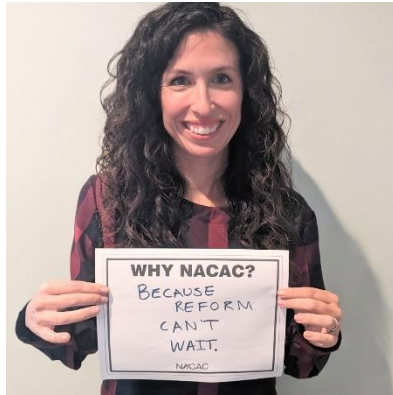
Morah Dina doing on site research!

Jessica Todd Harper (Art History): Mrs. Harper is a Smithsonian-featured photographer! This Fall has been a beautiful and busy time for our resident art history teacher, as her most recent book, *Here*, was published, and she has been featured in world-renowned galleries. Her images are currently on display at the

National Portrait Gallery of the Smithsonian, Rick Wester Fine Art, NYC, and The Centre Claude Cahun, France. Her compelling photos capture the beauty and art of family in the everyday. Congratulations on this monumental achievement.



Self Portrait with Catherine and Dolls, 2018



Ms. O pictured at NACAC

Marie Occhiogrosso (Admissions and College Counseling): One of 50 featured college counselors nationally! Each year, the National Association of College Admissions Counselors (NACAC) features 50 leaders in the field, drawing from high school counselors, community activists, and higher-ed admissions leaders. In November, Ms. Occhiogrosso was honored to be featured for her work with high schoolers navigating higher education and championing transparency in admissions practices. Additionally, she was selected for the spring Ethical Leadership in College Counseling cadre, where she will work with the state to advocate for students in our PA higher education system. Congratulations, Ms.

Occhiogrosso.

Tatiana Ter-Saakov (Math): Mrs. Ter-Saakov has been classified as a National Distinguished Math Teacher! This fall, MLCA was thrilled to learn that our own Mrs. Ter-Saakov had been nominated and named a winner of the Edyth May Sliffe Award for Distinguished Mathematics Teaching. This award is given annually to about 20 teachers nationwide for outstanding work in motivating students in mathematics and by participating in one or more of the American Mathematics Competitions (AMC) competitions.



Mrs. Ter-Saakov instructing fourth grade

Tatiana will receive a stipend as well as an all-expense paid trip to the MAA MathFest 2023, held in Tampa, FL in August, which is one of the largest national math / math education conferences in the US. Congratulations to an exemplary educator on being acknowledged for her contributions!

Rabbi Tzvi Sinensky (Director of Judaic Studies and Upper School Principal): Rabbi Sinensky had a busy trimester outside of MLCA. In addition to being published in *First Things*, *Tradition Magazine*, and *The Lehrhaus*, Rabbi Sinensky was named as a fellow in the Inaugural International Cohort of Sacks Scholars. The cohort is comprised of outstanding educators, academics, and

community leaders who were selected for their respective gifts in analysis. The cohort will study, discuss, and utilize the teachings of Rabbi Lord Jonathan Sacks, the former Chief Rabbi of Great Britain. The fellowship consists of an all-expenses-paid, four-day retreat in Jerusalem this summer, with subsequent sessions to further unpack and examine Rabbi Sacks' work and ultimately create a project that promotes Rabbi Sacks' legacy. Congratulations to Rabbi Sinensky on this prestigious appointment.



Rabbi Sinensky sits in discussion with Rabbi Lord Jonathan Sacks